

PART-3 UNIT 1

1. Which of the following is least likely to be an example of synergy?

- A. A shopping mall with several businesses providing different products and performing different services.
- B. A car dealership providing warranties on automobile parts to maximize customer value.
- C. A manufacturing company hiring a new manager with technological experience lacking in the company.
- D. Military Humvees being converted into sports utility vehicles for sale to civilians.

Answer (B) is correct.

Synergy occurs when the combination of formerly separate elements has a greater effect than the sum of their individual effects. However, a car dealership's provision of warranties reflects an operational strategy designed to provide post-purchase services to gain a competitive advantage and maximize customer value. It does not reflect the complementary sharing of resources, technology, or competencies. In contrast, synergy arises from selling a line of cars that share some components or a brand identification.

- A. A shopping mall with several businesses providing different products and performing different services is an example of market synergy.
- C. Hiring a manager with needed skills is an example of management synergy.
- D. Conversion of Humvees to SUVs is an example of technological synergy.

2. Which of the following best describes a market synergy?

- A. Technology transfer from one product to another.
- B. Bundling of products distributed through the same channels.
- C. Production of multiple products at one facility.
- D. Use of complementary management skills to achieve entry into a new market.

Answer (B) is correct.

Market synergy arises when products or services have positive complementary effects. Shopping malls reflect this type of synergy. Also, bundling of products, distribution through the same distribution channels, and use of the same sales force are other examples of market synergies.

- A. Technology transfer constitutes technology synergy.
- C. The production of multiple products at one production facility is an example of cost synergy.
- D. Using complementary management skills is an example of management synergy.

3. Which of the following is a market-oriented definition of a business versus a product-oriented definition of a business?

- A. Making air conditioners and furnaces.
- B. Supplying energy.
- C. Producing movies.
- D. Selling men's shirts and pants.

Answer (B) is correct.

Businesses should be defined in market terms, that is, in terms of needs and customer groups. Moreover, a distinction should be made between a target market definition and a strategic market definition. For example, a target market for a railroad might be freight hauling, but a strategic market might be transportation of any goods and people. Accordingly, stating that a business supplies energy is a market-oriented definition as opposed to the product-oriented definition. Moreover, it is also a strategic market definition.

- A. Air conditioners and furnaces are products, not customer needs.
- C. Movies are products, not a customer need (e.g., entertainment).
- D. Shirts and pants are products, not an underlying need.

4. Which one of the following is a social trend affecting the organization?

- A. Changes in labor markets.
- B. Tougher legislation to protect the environment.
- C. Rising inflation.
- D. Replacements for steel in cars and appliances.

Answer (A) is correct.

Social trends, such as changes in labor markets, reflect social, cultural, and demographic factors in the organization's macroenvironment that may constitute opportunities or threats (identified in a SWOT analysis). The attributes of people (age, education, income, ethnicity, family status, etc.) and their beliefs, attitudes, and values shape and are shaped by social trends that in turn affect the organization. Thus, changes in the characteristics, sources, locations, and costs of labor resources supplied (a basic factor of production) have great effects on an organization's strategic position.

- B. Tougher legislation to protect the environment is a political trend.
- C. Rising inflation is an economic trend.
- D. Replacements for steel in cars and appliances represent a technological trend.

5. Which of the following best describes a cost synergy?

- A. Recycling of by-products.
- B. Selling one product strengthens sales of another product.
- C. Transferring knowledge to new uses.
- D. Acquiring new management skills.

Answer (A) is correct.

Cost synergy results in cost reduction. It occurs in many ways, for example, in recycling of by-products or in the design, production, marketing, and sales of a line of products by the same enterprise.

- B. Selling one product strengthens sales of another product is an example of market synergy.
- C. Transferring knowledge to new uses is an example of technological synergy.
- D. Acquiring new management skills is an example of management synergy.

6. According to Michael E. Porter's generic strategies model, a firm that successfully adopts a differentiation strategy is most likely to

- A. Tend to disregard cost control.
- B. Risk overlooking product changes.

- C. Closely supervise its labor force.
- D. Be able to pass supplier cost increases on to its customers.

Answer (D) is correct.

Differentiation is the generic strategy of a firm that seeks competitive advantage through providing a unique product or service. This strategy has a broad competitive scope. A successful differentiation strategy creates a consumer perception that few, if any, substitutes are available. Thus, a firm that adopts this strategy may have the additional advantage of being able to pass supplier cost increases to buyers.

- A. A differentiation strategy does not signify a disregard for cost control, but simply a greater emphasis on creating a perception of the uniqueness of the product or service.
- B. A firm with a cost leadership strategy risks overlooking product changes.
- C. A firm with a cost leadership strategy is more likely to closely supervise its labor force.

7. According to Michael E. Porter's generic strategies model, a firm that successfully adopts a cost focus strategy is most likely to

- A. Have weak customer loyalty.
- B. Have a strong R&D function.
- C. Know its market well.
- D. Enjoy economies of scale.

Answer (C) is correct.

Cost focus is the generic strategy of a firm that seeks competitive advantage through lower costs but with a narrow competitive scope (e.g., a regional market or a specialized product line). The reason for a cost focus strategy is that the narrower market can be better served because the firm knows it well.

- A. Firms that successfully adopt a cost focus strategy achieve very strong customer loyalty, a disincentive to potential competitors.
- B. A firm adopting a differentiation strategy is more likely to have a strong R&D function. A firm that successfully adopts a cost focus strategy is more likely to have the strengths of a cost leadership firm.
- D. The cost (or differentiation) advantage of servicing a narrow target may be more than offset by the cost advantage achieved by broad-target competitors through economies of scale and other factors.

8.A strategic business unit (SBU) has a high relative market share (RMS) and a low business growth rate (BGR). According to the growth-share matrix for competitive analysis created by the Boston Consulting Group, the SBU is a

- A.Star.
- B.Question mark.
- C.Cash cow.
- D.Dog.

Answer (C) is correct.

The annual BGR reflects the maturity and attractiveness of the market and the relative need for cash to finance expansion. The RMS reflects an SBU's competitive position in the market segment. A high RMS signifies that the SBU has a strong competitive position. Cash cows have high RMS and low BGR. They are strong competitors and cash generators in low-growth markets.

- A.Stars have both high RMS and high BGR because they are strong competitors in high-growth markets.
- B.Question marks are weak competitors in high-growth markets, meaning they have a low RMS and a high BGR.
- D.Dogs have both low RMS and low BGR, meaning they are weak competitors in low-growth markets.

9.A manufacturing company produces plastic utensils for a particular segment at the lowest possible cost. The company is pursuing a cost

- A.Leadership strategy.
- B.Focus strategy.
- C.Differentiation strategy.
- D.Containment strategy.

Answer (B) is correct.

Cost focus is the generic strategy that seeks competitive advantage through lower costs but with a narrow competitive scope (e.g., a regional market or a specialized product line). The reason for a cost-focus strategy is that the narrower market can be better served because the firm knows it well.

- A. A cost leader is the lowest cost producer in the industry as a whole
- C. Cost differentiation sells a product at different costs in different market segments.
- D. Cost containment controls costs related to a particular product or market but does not necessarily produce the lowest possible cost.

10. A company sells a diverse line of cookies. Its acquisition of another company, a maker of cake mixes, is most likely an example of

- A. Vertical integration.
- B. Horizontal diversification.
- C. Concentric diversification.
- D. Conglomerate diversification.

Answer (B) is correct.

Horizontal diversification is the acquisition of businesses making products unrelated to current offerings but that might appeal to the firm's current customers. Cookies and cake mixes are based on different technologies but may be demanded by the same customers.

- A. Vertical integration occurs when suppliers, wholesalers, or retailers are acquired.
- C. Concentric diversification results from developing or acquiring related businesses that do not have products, services, or customers in common with current businesses but that offer internal synergies. Thus, the new products or services may be demanded by customers different from those currently served by the company.
- D. Conglomerate diversification is the acquisition of wholly unrelated businesses.

11. Business strategies may be characterized by their effects on operations. The distinction between a compact car and a luxury car reflects which operational strategy?

- A. Cost.
- B. Flexibility.
- C. Service.
- D. Quality.

Answer (D) is correct.

A quality strategy involves competition based on product quality or process quality. Product quality relates to design, for example, the difference between a luxury car and a subcompact car. Process quality concerns the degree of freedom from defects.

A.A cost strategy is successful when the enterprise is the low-cost producer. However, the product (e.g., a commodity) tends to be undifferentiated in these cases, the market is often very large, and the competition tends to be intense because of the possibility of high-volume sales.

B.A flexibility strategy entails offering many different products. This strategy also may reflect an ability to shift rapidly from one product line to another. An example firm is a publisher that can write, edit, print and distribute a book within days to exploit the public's short-term interest in a sensational event.

C.A service strategy seeks to gain a competitive advantage and maximize customer value by providing services, especially post-purchase services such as warranties on automobiles and home appliances.

12.What operations strategy is most likely to be adopted when the product sold by an organization is a commodity and the market is very large?

A.Flexibility strategy.

B.Quality strategy.

C.Service strategy.

D.Cost strategy.

Answer (D) is correct.

An operations strategy formulates a long-term plan for using resources to reach strategic objectives. A cost strategy is successful when the enterprise is the low-cost producer. However, the product (e.g., a commodity) tends to be undifferentiated in these cases, the market is often very large, and the competition tends to be intense because of the possibility of high-volume sales.

A.A flexibility strategy involves offering many different products.

B.A quality strategy involves competition based on product quality or process quality.

C.Service is not an issue in a sale of commodities.

13.Which of the following cycles does not have accounting information recorded into the general ledger reporting system?

A.Expenditure.

- B.Production.
- C.Planning.
- D.Revenue.

Answer (C) is correct.

Planning is the determination of what is to be done and of how, when, where, and by whom it is to be done. Plans serve to direct the activities that all organizational members must undertake and successfully perform to move the organization from where it is to where it wants to be. No transactions that require recording in the general ledger take place during the planning cycle.

- A.Purchasing, receiving, cash payments, and other transactions in the expenditure cycle are recorded in the general ledger.
- B.Accounting for costs, deferred costs, and property involved in the production or conversion of goods or services are recorded in the general ledger.
- D.Sales, receivables, cash receipts, bad debts, and other transactions in the revenue cycle are recorded in the general ledger.

14.Which of the following is not a recognized firm orientation?

- A.Product-centered.
- B.Competitor-centered.
- C.Customer-centered.
- D.Time-centered.

Answer (D) is correct.

The phrase “time-centered” is not meaningful in this context

- A.Product-centered firms focus primarily on the product.
- B.Competitor-centered firms mainly base moves on competitors’ actions and reactions.
- C.Customer-centered firms focus on customer developments and delivering value to customers.

15.Strategic management includes developing the organization’s grand strategy. This strategy is based on

- A.Existing strategic business units (SBUs).
- B.A SWOT analysis.
- C.Portfolio management of the organization's businesses.
- D.Strategic planning.

Answer (B) is correct.

Strategic management is a process that includes development of a grand strategy that describes how the organization's mission is to be achieved. This strategy is based on a situational analysis that considers organizational strengths and weaknesses (a capability profile) and their interactions with environmental opportunities and threats. Such an evaluation is also called a SWOT analysis. Strengths and weaknesses (the internal environment) are usually identified by considering the firm's capabilities and resources. What the firm does particularly well or has in greater abundance are known as core competencies. Opportunities and threats (the external environment) are identified by considering macroenvironment factors (economic, demographic, political, legal, social, cultural, and technical) and microenvironment factors (suppliers, customers, distributors, competitors, and other competitive factors in the industry).

A.Strategic planning follows the SWOT analysis. This step includes determining what SBUs the organization should have.

C.Strategic planning involves portfolio management of the firm's businesses, determining the strength of each business with respect to the potential of markets and the position of businesses in their markets, and creating a strategy for each business.

D.Strategic planning formulates specific and measurable objectives, plans, policies, and budgets after the grand strategy has been developed.

16.In a SWOT analysis, a firm considers macroeconomic factors when it identifies

- A.The capability profile.
- B.Opportunities and threats.
- C.Core competencies.
- D.Strengths and weaknesses.

Answer (B) is correct.

Opportunities and threats (the external environment) are identified by considering macroenvironmental factors (economic, demographic, political, legal, social, cultural, and technical) and microenvironmental factors (suppliers, customers, distributors, competitors, and other competitive factors in the industry).

A.The capability profile consists of the firm's strengths and weaknesses.

C.Strengths and weaknesses (the internal environment) are usually identified by considering the firm's capabilities and resources. What the firm does particularly well or has in greater abundance are known as core competencies.

D.Strengths and weaknesses (the internal environment) are usually identified by considering the firm's capabilities and resources.

17.A firm should state its primary competitive scopes when it

A.Defines its strategic business units (SBUs).

B.Establishes strategic control points.

C.Formulates its mission.

D.Makes investment and divestment decisions.

Answer (C) is correct.

At the highest level, a firm's strategic planning function involves formulating its mission (ultimate firm purposes and directions), determining its strategic business units (SBUs), allocating resources to SBUs, planning to start new businesses, and downsizing or divesting old businesses. A mission statement should address reasonably limited objectives, define the firm's major policies and values, and state the firm's primary competitive scopes (e.g., industries, products and services, applications, core competencies, market segments, degree of vertical integration, and geographic markets).

A.A firm defines its strategic business units (entities for which separate planning is possible) only after it formulates its mission.

B.Strategic controls monitor the implementation of strategic plans. Strategic planning begins when the firm formulates its mission.

D.A firm makes investment and divestment decisions only after it formulates its mission.

18.Strategic control measures that relate to external effectiveness apply to customer satisfaction at the

A.Departmental level.

B.Business-operating-system level.

C.Business-unit level.

D. Work-center level.

Answer (B) is correct.

Strategic controls should be established to monitor progress, isolate problems, identify invalid assumptions, and take prompt corrective action. As plans are executed at each organizational level, control measurements are made to determine whether objectives have been achieved. Thus, objectives flow down the organizational hierarchy, and control measures flow up. One category of strategic control measures relates to external effectiveness. At the business-operating-system level, these measures concern satisfaction and flexibility.

A. At the departmental or work-center level, these measures concern quality and delivery.

C. At the business-unit level, these measures concern performance in the marketplace (market share, etc.).

D. At the departmental or work-center level, these measures concern quality and delivery.

19. Strategic control measurements of financial results relate to

A. Internal efficiency at the business-unit level.

B. Internal efficiency at the departmental level.

C. External effectiveness at the business-unit level.

D. External effectiveness at the business-operating-system level.

Answer (A) is correct.

Strategic controls should be established to monitor progress, isolate problems, identify invalid assumptions, and take prompt corrective action. As plans are executed at each organizational level, control measurements are made to determine whether objectives have been achieved. Thus, objectives flow down the organizational hierarchy, and control measures flow up. One category of strategic control measures relates to external effectiveness. A second category of strategic control measures relates to internal efficiency. At the business-unit level, the latter measures concern financial results.

B. Measures of internal efficiency at the departmental level concern cycle time and waste.

C. Measures of external effectiveness at the business-unit level concern performance in the marketplace (market shares, etc.).

D. Measures of external effectiveness at the business-operating-system level concern flexibility.

20.Strategic management includes establishment of appropriate controls. Control measurements are made to determine whether organizational objectives are being achieved. One category of strategic control measures concerns external effectiveness. A measurement relating to external effectiveness is

- A.Cycle time.
- B.Waste.
- C.Flexibility.
- D.Productivity

Answer (C) is correct.

Strategic control measures apply to external effectiveness or internal efficiency. Flexibility overlaps these categories. It relates to effectiveness and efficiency. Thus, an organization must be externally flexible in responding to changing customer needs and internally flexible in reordering its structural arrangements, retraining employees, etc.

- A.Cycle time is an internal efficiency measure.
- B.Waste is an internal efficiency measure.
- D.Productivity is an internal efficiency measure.

21.Strategic management is a five-step process. In what order should the five steps be accomplished?

- A.SWOT analysis, mission and goals, strategy, controls and feedback, implementation.
- B.Mission and goals, SWOT analysis, strategy, implementation, controls and feedback.
- C.Mission and goals, strategy, implementation, SWOT analysis, controls and feedback.
- D.Strategy, SWOT analysis, mission and goals, controls and feedback, implementation.

Answer (B) is correct.

Strategic management is a five-step process:

1. The board of directors drafts the organization's mission statement, a general statement of what the organization intends to accomplish and its reason for existing. The statement may be accompanied by one or more goals, which are concrete targets for measuring the organization's success.

2. The organization performs a situational analysis, also called a SWOT analysis, involving identification of its strengths, weaknesses, opportunities, and threats.
3. Based on the results of the situational analysis, upper management develops a group of strategies describing how the mission statement will be fulfilled.
4. Strategic plans are implemented through the execution of component plans at each level of the entity.
5. Strategic controls and feedback are used to monitor progress, isolate problems, and take corrective action. Over the long term, feedback can be used to adjust the original mission and goals.

A. Drafting the organization's mission and goals is the first step in the process of strategic management. Also, controls and feedback are established at the end of the process.

C. The SWOT analysis must be performed prior to strategy development and implementation.

D. Organization mission and goals are drafted during the first step in the strategic management process, followed by the SWOT analysis. Establishment of controls and feedback occurs at the end of the process.

22. Which of the following steps in the strategic planning process should be completed first?

- A. Translate objectives into goals.
- B. Determine actions to achieve goals.
- C. Develop performance measures.
- D. Create a mission statement.

Answer (D) is correct.

A mission statement is a formal, written document that defines an organization's ultimate purposes in society in general terms. After a situational analysis is performed, the entity develops a group of strategies for achieving the mission.

- A. A subsequent step is to translate longer-range objectives into shorter-range objectives. However, the terms "objectives" and "goals" are defined differently by different authors. For example, "goals" might be longer-range than "objectives."
- B. Determining the specific actions to achieve objectives (goals) follows defining the mission.
- C. An organization does not develop performance measures before defining its mission.

23. A firm's statement of broad objectives or mission statement should accomplish all of the following except

- A. Outlining strategies for technological development, market expansion, and product differentiation.
- B. Defining the purpose of the company.
- C. Providing an overall guide to those in high-level, decision-making positions.
- D. Stating the moral and ethical principles that guide the actions of the firm.

Answer (A) is correct.

The determination of organizational objectives is the first step in the planning process. A mission statement is a formal, written document that defines the organization's purpose in society, for example, to produce and distribute certain goods of high quality in a manner beneficial to the public, employees, shareholders, and other constituencies. Thus, a mission statement does not announce specific operating plans. It does not describe strategies for technological development, market expansion, or product differentiation because these are tasks for operating management.

- B. A mission statement defines the purpose of the company (some writers differentiate between purpose and mission).
- C. Broad objectives provide guidance to those in high-level positions who are responsible for long-range planning.
- D. Mission statements increasingly are concerned with ethical principles.

24. What is strategic planning?

- A. It establishes the general direction of the organization.
- B. It establishes the resources that the plan will require.
- C. It establishes the budget for the organization.
- D. It consists of decisions to use parts of the organization's resources in specified ways.

Answer (A) is correct.

Strategic planning establishes the general direction of an organization. It embodies the concerns of senior management and is based specifically on (1) identifying and specifying organizational objectives; (2) evaluating the organization's strengths and weaknesses; (3) assessing risk levels; (4) identifying and forecasting the effect of external (environmental) factors relevant to the organization; (5) deriving the best strategy for reaching the objectives, given the organization's strengths and weaknesses and the

relevant future trends; and (6) analyzing and reviewing the capital budgeting process and capacity planning.

B. Establishing the resources the strategic plan will require is merely one phase of strategic planning.

C. Establishing the budget for the organization cannot take place until the strategic plan is complete.

D. Decisions to use parts of the organization's resources in specified ways defines operational planning.

25. Which of the following is an example of an outcome of strategic planning?

A. A formal statement of the organization's definition of the fundamental truths that guide its actions.

B. A broad statement of concepts that emphasizes the implementation of organizational objectives over the long term.

C. A set of general guides for action that channel thinking and allow a certain amount of discretion in execution.

D. A document specifying a sequence of steps detailing the exact manner in which a certain activity must be accomplished.

Answer (B) is correct.

The strategic plan states the means by which an entity expects to achieve its stated mission. Achieving the mission is predicated on implementing long-term objectives.

A. Truths that guide an organization's actions are principles.

C. General guides for action are policies.

D. A detailed sequence of steps for accomplishing a certain activity is a procedure.

26. Which one of the following management considerations is usually addressed first in strategic planning?

A. Outsourcing.

B. Overall objectives of the firm.

C. Organizational structure.

D. Recent annual budgets.

Answer (B) is correct.

Strategic planning is the process of setting overall organizational objectives and drafting strategic plans. Setting ultimate objectives for the firm is a necessary prelude to developing strategies for achieving those objectives. Plans and budgets are then needed to implement those strategies.

- A. Outsourcing is an operating decision of a more short-term nature.
- C. Organizational structure, although important in strategic planning, is based upon the firm's overall objectives.
- D. Recent annual budgets are a basis for short-term planning.

27. All of the following are characteristics of the strategic planning process except the

- A. Emphasis on long run.
- B. Analysis of external economic factors.
- C. Review of the attributes and behavior of the organization's competition.
- D. Analysis and review of departmental budgets.

Answer (D) is correct.

Strategic planning is the process of setting the overall organizational objectives and involves the drafting of strategic plans. Analysis and review of departmental budgets is an aspect of operational management.

- A. Emphasis on the long run is an aspect of strategic planning.
- B. Analysis of external economic factors is an aspect of strategic planning.
- C. Consideration of competitive factors and analysis of consumer demand are all aspects of strategic planning.

28. Strategic planning, as practiced by most modern organizations, includes all of the following except

- A. Top-level management participation.
- B. A long-term focus.
- C. Strategies that will help in achieving long-range goals.

D. Analysis of the current month's actual variances from budget.

Answer (D) is correct.

Strategic planning is the process of setting overall organizational objectives. It is a long-term process aimed at determining the future course of the organization. Analysis of the current month's budget variances is a short-term activity.

A. Top-level management participation is an element of strategic planning.

B. A long-term focus is an element of strategic planning.

C. Strategies that will help in achieving long-range goals are elements of strategic planning.

29. Which of the following is an advantage of strategic management?

A. It prevents budget overruns.

B. It ensures industry dominance.

C. It is consistent with the trend away from authoritarian managerial styles.

D. It is most useful for entities that have already formulated their mission statements.

Answer (C) is correct.

Strategic thinking helps employees understand and implement managerial decisions. Moreover, it is consistent with the modern trend toward cooperation and teamwork and away from authoritarian managerial styles.

A. The strategic management process can include a budgeting component, but it does not guarantee that the budget's goals will be achieved.

B. The strategic management process includes a competitive industry analysis but does not guarantee that the firm will dominate its industry.

D. Formulating the mission statement can be a part of the strategic management process.

30. An entity's mission statement is usually decided on by the

A. Board of directors.

B. Applicable laws of the state of incorporation.

C. Stockholders at the first general meeting.

D. Executive-level management.

Answer (A) is correct.

The board of directors drafts the organization's mission statement.

B. State incorporation laws do not govern corporate mission statements.

C. Drafting a mission statement in a general stockholders' meeting would be extremely unwieldy.

D. Upper management carries out the mission statement; it does not create it.

31. A SWOT analysis consists of all of the following except

A. Opportunities and threats.

B. Core competencies.

C. Market share plan.

D. Strengths and weaknesses.

Answer (C) is correct.

A plan to keep or capture market share cannot be drafted until the SWOT analysis is complete.

A. Opportunities and threats (the external environment) are identified by considering both macroenvironment factors and microenvironment factors.

B. Core competencies are the source of competitive advantages that in turn are the basis for an overall strategy.

D. Strengths and weaknesses (the internal environment) are usually identified by considering the firm's capabilities and resources.

32. A medical billing service is able to charge more than its competitors because it always meets its deadlines. This is an example of the successful application of a

A. Delivery strategy.

B. Cost strategy.

C.Implementation strategy.

D.Synergy strategy.

Answer (A) is correct.

A delivery strategy may permit an enterprise to charge a higher price when the product is consistently delivered rapidly and on time.

B.A cost strategy is successful when the enterprise is the low-cost producer.

C.“Implementation strategy” is not a recognized type of operations strategy.

D.“Synergy strategy” is not a recognized type of operations strategy

33.Which of the following is an example of technological synergy?

A.An airline merging with an auto-rental company.

B.A cosmetics manufacturer branching out into pharmaceuticals.

C.Selling rejected products at a reduced price after minimal rework.

D.Transferring a former finance officer to the internal audit activity.

Answer (B) is correct.

The firm is applying its production technology to the generation of a new family of products.

A.An airline merging with an auto-rental company is an example of market synergy.

C.Selling rejected products at a reduced price after minimal rework is an example of cost synergy.

D.Transferring a former finance officer to the internal audit activity is an example of management synergy.

34.In accordance with Michael E. Porter’s generic strategies model, a firm with a broad competitive scope that has high sales volume, low margins, and efficient supply and distribution channels will most likely choose a

A.Cost leadership strategy.

B.Cost focus strategy.

C.Differentiation strategy.

D.Focused differentiation strategy.

Answer (A) is correct.

Cost leadership is the generic strategy of a firm that seeks competitive advantage through lower costs. It has a broad competitive scope. Such a firm can earn higher profits than its competitors at the industry average price or charge a lower price to increase market share. The typical firm that follows a cost leadership strategy has low profit margins, a high volume of sales, and a substantial market share. Such a firm has efficient supply and distribution channels, is capable of large capital investment, has strengths in product design and process engineering, if it is a manufacturer, and closely supervises its labor force.

B.A cost focus strategy has a narrow competitive scope.

C.Differentiation is the generic strategy favored by firms that seek competitive advantage through providing a unique product or service and that have a broad competitive scope.

D.Focused differentiation is the generic strategy favored by firms that seek competitive advantage through providing a unique product and that have a narrow competitive scope, e.g., a regional market or a specialized product line.

35.All of the following are characteristics of a firm using a differentiation strategy except

A.Generating a perception that buyers have few, if any, substitutes.

B.A creative product development function.

C.A wide choice of suppliers and distributors.

D.The risk that consumer tastes may change.

Answer (C) is correct.

A differentiating firm must achieve tight coordination with its suppliers and distributors.

A.A successful differentiation strategy creates a buyer perception that few, if any, substitutes are available.

B.Creative product development is a typical strength of a broad-scope differentiator.

D.Differentiators face the risk that consumer tastes will change as they become more sophisticated buyers or as they have less need for the differentiating factor.

36. In the Boston Consulting Group (BCG) growth-share matrix, which strategic business units are strong competitors in high growth markets but usually have modest net cash flow?

- A. Cash cows.
- B. Question marks.
- C. Dogs.
- D. Stars.

Answer (D) is correct.

A star is a strong competitor in a high growth industry. It is profitable but needs large amounts of cash for expansion, R&D, and meeting competitors' attacks.

- A. A cash cow generates more cash than it requires, providing funds to the firm to invest in other ventures.
- B. A question mark deserves attention to determine whether the venture is viable. The business is in a growing industry but has not achieved a strong competitive position.
- C. A dog is a business situated in a low growth or declining industry and, if not positioned strongly, will be divested.

37. A firm has a strategic business unit (SBU) that has a low market share in a high growth market. To maintain even this low share of the market requires the firm to commit a significant amount of cash. The firm might successfully adopt a build strategy for this unit if the

- 1) SBU shows a strong potential to grow and obtains a significant share of the market.**
- 2) Firm can finance its growth.**
- 3) Firm expects a short-term increase in cash flow.**
- 4) Firm is willing to forgo short-term earnings.**

- A. 1 only.
- B. 2 and 3 only.
- C. 3 and 4 only.
- D. 1, 2, and 4 only.

Answer (D) is correct.

One of the two portfolio models most frequently used for competitive analysis was created by the Boston Consulting Group (BCG). This model, the growth-share matrix, has two variables. The business growth rate (BGR) is on the vertical axis, and the firm's relative market share (RMS) is on the horizontal axis. The growth-share matrix has four quadrants. The firm's SBUs are commonly represented in their appropriate quadrants by circles. The size of a circle is directly proportional to the SBU's sales volume. Question marks (low RMS, high BGR) are weak competitors in high-growth markets. They need large amounts of cash not only to finance growth and keep pace with the market but also to increase RMS, but do poorly in cash generation. If RMS increases significantly, a question mark may become a star. If not, it becomes a dog. A build strategy is necessary for a question mark with the potential to be a star. Consequently, a firm may adopt a build strategy for this type of SBU if it shows a strong potential to grow, if the firm is willing to forgo short-term earnings and cash flow, and if the firm is willing and has the capacity to finance its growth. However, a firm that expects only a short-term increase in cash flow may adopt either a divest or a harvest strategy but not a build strategy. This type of SBU needs a lot of cash flow to finance its growth.

A. A question mark that adopts a build strategy also should be able to finance its growth and be willing to forgo short-term earnings.

B. A short-term increase in cash flow indicates a need to adopt a harvest or a divest strategy.

C. A short-term increase in cash flow indicates a need to adopt a harvest or a divest strategy.

38. A strategic business unit (SBU) has a low relative market share (RMS) and a high business growth rate (BGR). According to the portfolio model for competitive analysis (the growth-share matrix) created by the Boston Consulting Group, the SBU is considered a

A. Star.

B. Question mark.

C. Cash cow.

D. Dog.

Answer (B) is correct.

Question marks (low RMS, high BGR) are weak competitors and poor cash generators in high-growth markets. They need large amounts of cash not only to finance growth and compete in the market but also to increase RMS. If RMS increases significantly, a question mark may become a star. If not, it becomes a dog.

A. Stars (high RMS, high BGR) are strong competitors in high-growth markets. Such an SBU is profitable, but needs large amounts of cash for expansion, R&D, and to meet competitors' attacks. Net cash flow (plus/minus) is modest.

C. Cash cows (high RMS, low BGR) are strong competitors and cash generators. An SBU that is a cash cow ordinarily enjoys high profit margins and economies of scale. Financing for expansion is not

needed, so the SBU's excess cash can be used for investments in other SBUs. However, marketing and R&D expenditures should not necessarily be slashed excessively. Maximizing net cash inflow might precipitate a premature decline from cash cow to dog.

D.Dogs (low RMS, low BGR) are weak competitors in low-growth markets. Their net cash flow (plus/minus) is modest.

39. According to the Boston Consulting Group's portfolio model for competitive analysis, the strategy for a strong cash cow should be

- A. Harvest.
- B. Divest.
- C. Hold.
- D. Build.

Answer (C) is correct.

A hold strategy is used for strong cash cows. It is necessary if the business is to continue to generate large net cash inflows. Harvesting might impair a strong cash cow's ability to generate long-term positive net cash inflows.

- A. A harvest strategy is used for weak cash cows and possibly dogs.
- B. A divest strategy is used for question marks and dogs that reduce the firm's profitability.
- D. A build strategy is appropriate for a question mark with the potential to be a star.

40. An advantage of a direct investment strategy when entering a foreign market is

- A. Reduction in the capital at risk.
- B. Shared control and responsibility.
- C. Assurance of access when the foreign country imposes domestic content rules.
- D. Avoidance of interaction with the local bureaucracy.

Answer (C) is correct.

Direct investment has many advantages: (1) cheaper materials or labor, (2) receipt of investment incentives from the host government, (3) a strong relationship with interested parties in the host country, (4) control of the investment, (5) a better image in the host country, and (6) market access when domestic content rules are in effect. However, direct investment is risky because of exposure to currency fluctuations, expropriation, potentially high exit barriers, and restraints on sending profits out of the country.

- A. Direct investment maximizes capital at risk.
- B. Direct investment avoids shared control and responsibility.
- D. Direct investment means a closer relationship with governmental entities in the host country

41. A global firm

- A. Has achieved economies of scale in the firm's domestic market.
- B. Plans, operates, and coordinates business globally.
- C. Relies on indirect export.
- D. Tends to rely more on one product market.

Answer (B) is correct.

Global firms plan, operate, and coordinate their activities worldwide. Thus, a global firm secures cost or product differentiation advantages not available to domestic firms.

- A. One reason to go abroad is that economies of scale are so great that they cannot be achieved in a domestic market.
- C. Global firms do not rely only on indirect export. They rely on direct export, which is potentially more profitable.
- D. A global firm may be a small firm that sells one product or class of products, or it may be a large firm with a multiproduct line.

42. A firm expands into international markets to

- A. Be in foreign markets.
- B. Eliminate foreign competition
- C. Pursue new, higher-profit opportunities.

D.Preclude piracy of the firm's products.

Answer (C) is correct.

A firm may decide to go abroad for many reasons, for example, to respond to a competitive challenge in its home country by another global firm, to pursue opportunities yielding greater profits, to achieve economies of scale, to diversify, or to follow customers who need international service.

A.A firm should enter international markets for well-defined purposes, not for some vague reason such as establishing a presence.

B.A firm's counterattack in a foreign market is not likely to eliminate the competitor. However, it may serve as a market signal that will influence the foreign competitor's behavior in a way favorable to the firm.

D.Expansion does not prevent piracy.

43.The least risky method of entering a market in a foreign country is by

A.Indirect exports.

B.Licensing.

C.Direct exports.

D.Direct investments.

Answer (A) is correct.

An indirect export strategy operates through intermediaries, such as home-country merchants who buy and resell the product, home-country agents who negotiate transactions with foreign buyers for a commission, cooperatives that represent groups of sellers, and export-management firms that receive fees for administering the firm's export efforts. Indirect export requires lower investment than direct export and is less risky because of the intermediaries' expertise.

B.Licensing a process, patent, trade secret, etc., is a way to gain a foothold in a foreign market with little immediate risk. However, the licensor may have insufficient control over the licensee's operations, profits are lost if the arrangement succeeds, and the licensee ultimately may become a competitor.

C.Direct export involves higher risk and investment but may yield higher returns.

D.Direct investment has many advantages: (1) cheaper materials or labor, (2) receipt of investment incentives from the host government, (3) a strong relationship with interested parties in the host country, (4) control of the investment, (5) a better image in the host country, and (6) market access when domestic contest rules are in effect. However, direct investment is risky because of exposure to

currency fluctuations, expropriation, potentially high exit barriers, and restraints on sending profits out of the country.

44. Which strategy for a global marketing organization is based on a portfolio of national markets?

- A. Creation of a division to manage international marketing.
- B. A multinational strategy.
- C. A glocal strategy.
- D. Creation of an export department.

Answer (B) is correct.

International marketing efforts take three basic forms: creation of an export department, creation of a division to manage international marketing, or global organization. The third form encompasses genuinely worldwide functions, e.g., manufacturing, marketing, finance, and logistics. Thus, worldwide operations are the organization's focus, not merely that of a department or division of a national firm. A global organization may follow a multinational, global, or glocal strategy. A multinational strategy adopts a portfolio approach. Its emphasis is on national markets because the need for global integration is not strong. The product is customized for each market and therefore incurs higher production costs. Decision making is primarily local with a minimum of central control. This strategy is most effective given large differences between countries. Also, exchange rate risk is reduced when conducting business in this manner.

- A. Export departments and international divisions are organizational arrangements that precede the firm's evolution into a global organization.
- C. Glocal strategy balances local responsiveness and global integration.
- D. Export departments and international divisions are organizational arrangements that precede the firm's evolution into a global organization.

45. Which strategy for a global marketing organization balances local responsiveness and global integration?

- A. Global.
- B. Multinational.
- C. Glocal.
- D. Transnational.

Answer (C) is correct.

A glocal strategy seeks the benefits of localization (flexibility, proximity, and adaptability) and global integration. Successful telecommunications firms are examples of balancing these elements. Local responsiveness is indicated when local product tastes and preferences, regulations, and barriers are significant. Global integration is indicated when demand is homogeneous and economies of productive scale are large.

A.A global strategy is weighted toward global integration.

B.A multinational strategy is weighted toward local responsiveness.

D.The term “transnational” is sometimes applied to firms that operate internationally but with a decentralized overall structure

46.Which strategy for a global marketing organization emphasizes relatively strong central control?

A.Global.

B.Multinational.

C.Creation of an international division.

D.Glocal.

Answer (A) is correct.

A global strategy regards the world as one market. The product is essentially the same in all countries. Central control of the production process is relatively strong. Faster product development and lower production cost are typical.

B.Decision making is primarily local with a minimum of central control in a multinational strategy.

C.Creation of an international division occurs before a firm becomes a global organization.

D.A glocal strategy combines some elements of local responsiveness or adaptation with some elements of global integration.

47.Which of the following is correct regarding the impacts of a global strategy on an organization?

Slower	Higher	Global Firms
Product	Production	Managed through
<u>Development</u>	<u>Costs</u>	<u>One Central Country</u>
A. Yes	Yes	Yes
B. No	No	No
C. No	No	Yes
D. No	Yes	No

Answer (C) is correct.

A global strategy regards the world as one market. In a global strategy, faster product development and lower production costs are typical. Additionally, global firms are primarily managed from one central country, even though their products may be sold throughout the world.

A.A global strategy does not result in slower product development or higher production costs.

B.A global strategy does result in global firms being managed through a central country.

D.A global strategy does not result in higher production costs.

48.In a regional strategy, an organization has which of the following goals?

A.To combine the elements of multinational and international, but not multilocal, strategies.

B.To create a universal product and value chain that serves the needs of all countries in which the firm operates.

C.To combine the various operating segments of the organization based on the region in which they operate.

D.To create regional products and a regional value chain.

Answer (D) is correct.

The goal of a regional strategy is to create regional products and a regional value chain.

A. Although a regional strategy combines elements of multinational, international, and multilocal strategies, it is not the goal of the organization undertaking such a strategy.

B. In a regional strategy, the goal is not to create a single product or value chain.

C. This is not a goal of a strategy for global marketing organizations.

49. The disadvantage of a multilocal or multidomestic strategy is that the company

A. Uses subsidiaries in the home country to control operations.

B. Adapts the product for the global market but not for each country.

C. Makes decisions at a centralized location in the home country.

D. Incurs higher costs and lower economies of scale.

Answer (D) is correct.

A multilocal strategy has the disadvantage of increasing costs and decreasing economies of scale.

A. In a multilocal strategy, the organization uses subsidiaries in the host countries, not the home country, to control operations.

B. In a multilocal strategy, the organization adapts the product for each country.

C. A multilocal strategy typically leaves decisions to be made by the subsidiaries of the organization.

50. Davian Wood Products produces customized products for each country it operates in. As a result, it can be said that

A. Davian is using a multinational strategy and is saving production costs.

B. Davian is using a global strategy and is incurring higher production costs.

C. Davian is using an international strategy, resulting in centralized decision making.

D. Davian is using a multinational strategy and incurring higher production costs.

Answer (D) is correct.

A multinational strategy adopts a portfolio approach. Under this approach, the product is customized for each market, and higher production costs are incurred.

- A. While a multinational strategy involves customizing products, higher (not lower) production costs are usually incurred.
- B. A global strategy regards the world as one market. The product is essentially the same in all countries, and lower production costs are typical.
- C. Under an international strategy, the product is essentially the same in all countries.

51. Which of the following strategies combines elements of multinational, international, and multilocal strategies?

- A. Multidomestic strategy.
- B. Transnational strategy.
- C. All-encompassing strategy.
- D. Regional strategy.

Answer (D) is correct.

A regional strategy combines elements of multinational, international, and multilocal strategies. The goal of this strategy is to create regional products and a regional value chain.

- A. A multidomestic strategy is another name for the multilocal strategy, which is a component of the regional strategy.
- B. A transnational strategy is another name for a multinational strategy, which is a component of the regional strategy.
- C. "All-encompassing strategy" is not a meaningful term in this context

52. Which of the following best describes a multilocal or multidomestic strategy used by a global marketing organization?

- A. It lowers costs by increasing economies of scale.
- B. Products and services are better adapted to local markets.
- C. More coordination is required by decision makers in the home country.
- D. Resources are standardized and drawn from the the country that has the lowest costs.

Answer (B) is correct.

A multilocal or multidomestic strategy uses subsidiaries in the host countries to control operations. The product is adapted for each country.

A. Because a multilocal or multidomestic strategy customizes products or services for local markets, it increases costs and lowers economies of scale.

C. A multilocal strategy allows decisions to be made by the subsidiaries of the organization. Thus, less coordination is required by decision makers in the home country.

D. A multilocal strategy uses local resources.

53. A firm wishing to sell its well-known brand of men's clothing in a certain foreign country redesigned the products because of the greater average size of consumers in that country. However, the firm retained the same basic advertising campaign. This firm has adopted which adaptation strategy?

A. Straight extension.

B. Product adaptation.

C. Forward invention.

D. Backward invention.

Answer (B) is correct.

Using a product adaptation strategy, a firm makes changes to the product for each market but not its promotion. This strategy may reduce profit potential but also may provide a marketing advantage by considering local wants and needs.

A. The product was adapted.

C. No new product was created.

D. No older product was reintroduced

54. Developing brand equity in a foreign market may be desirable but is subject to considerable risk. A global firm launching a new product in a new market most likely should

A. Initially place most of the firm's emphasis on advertising geared to the local culture.

B. Fully decentralize control of the marketing process.

C. Avoid creating partnerships with local distribution channels to avoid dilution of the brand.

D. Balance standardization and customization of the product.

Answer (D) is correct.

The firm should determine the ratio of standardization and customization. Products that can be sold virtually unchanged throughout several markets provide a greater profit opportunity for a global firm. However, cultural differences may require extensive customization to appeal to markets in different countries.

A. Integrated marketing communications should be developed. Markets must be approached with a broad range of messages. Sole reliance on advertising should be avoided. Other marketing communications include merchandising, promotions, and sponsorship.

B. The firm should determine the ratio of local to global control. Local managers may understand the wants and needs of their market, but the global firm must still retain control of certain elements of the marketing process and strategy.

C. The firm may create branding partnerships. Global firms often form alliances with local distribution channels to increase their profitability while decreasing their marketing costs.

55. Bulez Widgets, Inc., operates globally and has been praised for its ability to understand the needs and wants of the local market while retaining global control of certain elements of the marketing process and strategy. Bulez is

A. Establishing local guidelines so that local sales and profit goals are met.

B. Maintaining a good ratio of standardization and customization.

C. Maintaining a good ratio of local to global control.

D. None of the answers are correct.

Answer (C) is correct.

Bulez is maintaining a good ratio of local to global control. Local managers may understand the wants and needs of their market, but the global firm must still retain control of certain elements of the marketing process and strategy.

A. Bulez is maintaining a good ratio of local to global control, not establishing local guidelines.

B. A firm should determine a ratio of standardization and customization. Products that can be sold virtually unchanged throughout several markets provide a greater profit opportunity for a global firm.

D. Bulez is maintaining a good ratio of local to global control.

56.The creation of regional free trade zones is a global phenomenon. Trade barriers are lowered in these areas, and other steps are taken to promote economic cooperation. For example, a common currency has been adopted by the nations of

- A.NAFTA.
- B.Mercosul.
- C.APEC.
- D.The European Union.

Answer (D) is correct.

The European Union (EU) is a group of European nations that have lowered trade barriers among member states, and most share a common currency and trade policy. The euro is the common currency of most members of the European Union.

A.The North American Free Trade Agreement (NAFTA) was created by the U.S., Mexico, and Canada. It will likely be expanded to South American countries. However, NAFTA does not provide for a common currency.

B.Mercosul is a free trade agreement of South American nations, which includes Argentina, Brazil, Uruguay, and Paraguay, with Chile and Bolivia as associate members. However, these nations have no common currency.

C.APEC (the Asian Pacific Economic Cooperation forum) is a collection of Pacific-rim nations dedicated to promote increased trade with each other and the rest of the world. However, these nations have no common currency.

57.Which method of expanding into international markets is most likely the riskiest?

- A.A local storage and sale arrangement.
- B.Local component assembly.
- C.Direct investment.
- D.Joint venture.

Answer (C) is correct.

Direct investment has many advantages: (1) cheaper materials or labor, (2) receipt of investment incentives from the host government, (3) a strong relationship with interested parties in the host country, (4) control of the investment, (5) a better image in the host country, and (6) market access when domestic contest rules are in effect. However, direct investment is risky because of exposure to

currency fluctuations, expropriation, potentially high exit barriers, and restraints on sending profits out of the country.

A. In a local storage and sale arrangement, products manufactured in one country are then shipped to a marketing facility located in another country. It is less risky than direct investment.

B. Local component assembly involves shipping individual parts from one country to an assembly facility in a second country. They are then turned into a salable product and sold in the second country or exported to other countries. It is less risky than direct investment.

D. In multiple or joint ventures, several firms, even competitors, work together to create products that are sold under one or more brand names in different countries. They share responsibility, ownership, costs, and profits.

58. Political events such as the growth of China as an economic power; the emergence of other economic powers, such as India and Brazil; and the expansion of the European Union have largely driven

A. A global increase in barriers to entry.

B. A decrease in economies of scale.

C. A tendency to discourage standardization.

D. A trend toward globalization.

Answer (D) is correct.

Globalization is driven by such political events as the growth of China as an economic power; the emergence of other economic powers, such as India and Brazil; and the expansion of the European Union as well as the creation of other regional free trade zones.

A. These events would likely decrease the barriers to entry.

B. These events would likely increase, not decrease, economies of scale.

C. These events would likely encourage standardization.

59. What is an advantage of direct investment over indirect investment?

- A. The host country's control over the investment.
- B. Cheaper materials.
- C. A better image in the home country.
- D. Exposure to currency fluctuations.

Answer (B) is correct.

The advantages of direct investment over indirect investment include (1) cheaper materials or labor, (2) receipt of investment incentives from the host government, (3) a strong relationship with interested parties in the host country, (4) control of the investment, (5) a better image in the host country, and (6) market access when domestic content rules are in.

- A. An advantage of direct investment is the home country's, not the host country's, control over the investment.
- C. An advantage of direct investment is a better image in the host country, not the home country.
- D. Exposure to currency fluctuations is a risk, not advantage, of direct investment.

60. CosmoGraphics, Inc., has been operating in the United States but plans to brand its products globally. It recently hired Rajiv Gupta, an internationally oriented CEO, in order to make this transition. Rajiv believes that talent, not nationality, should determine staffing decisions throughout the firm. Rajiv's managerial attitude can best be described as

- A. Ethnocentric.
- B. Polycentric.
- C. Geocentric.
- D. Egocentric.

Answer (C) is correct.

A geocentric attitude is truly internationally oriented, absorbing the best that various cultures offer. Talent, not nationality, determines personnel decisions throughout the firm.

- A. An ethnocentric attitude assumes that the home country's people, practices, and ideas are superior to all others. Thus, nationality is the most important factor.
- B. A polycentric attitude assumes that cultural differences require local managers to make most decisions. Thus, talent is less of a factor than nationality.

D.Egocentrism is characterized by a preoccupation with one's own world. Egocentrics consider themselves and their opinions as being the most important. However, this is not considered a management attitude.

61.Garrison Woodproducts and Mathis Woodproducts are the two largest wood product competitors in the United States. However, these two companies work together to produce woodproducts for Europe under the name of United Woodproducts. What method are Garrison and Mathis using to expand into global markets?

A.Exporting.

B.Licensing.

C.Joint venture.

D.Local component assembly.

Answer (C) is correct.

In multiple or joint ventures, several firms, even competitors, work together to create products that are sold under one or more brand names in different countries. They share responsibility, ownership, costs, and profits.

A.Exporting is the sale in other countries of goods manufactured in one country. The facts in this question do not indicate an exporting arrangement.

B.Licensing gives firms in foreign countries the right to produce or market products or services within a geographical area for a fee. The facts in this question do not indicate a licensing arrangement.

D.Local component assembly involves shipping individual parts from one country to an assembly facility in a second country. They are then turned into a salable product and sold in the country or exported to other countries. The facts in this question do not indicate a local component assembly method.

62.To enter the global marketplace, firms in foreign countries can purchase the right to produce or market products or services within a geographical area. This strategy is

A.Exporting.

B.Licensing.

C.Direct investment.

D. Indirect exporting.

Answer (B) is correct.

Licensing a patent, process, trade secret, etc., gives firms in foreign countries the right to produce or market products or services within a geographical area for a fee. It is a means of market entry with little immediate risk.

A. Exporting is the sale of goods manufactured in one country and then sold in other countries.

C. Direct investment involves ownership of business operations in foreign markets.

D. An indirect export strategy operates through local intermediaries, e.g., home-country merchants who buy and resell the product.

63. An organization has operations in the United States, as well as in several other countries. Management of operations for organizations that are in more than one country should consider economic, political, legal, social, and cultural issues. Which of the following is an example of an economic issue?

A. Management spends a considerable amount of time following changes in government policy, government involvement in trade unions, and agreements for each country and local jurisdiction.

B. The organization experienced serious disruption when a major seaport was closed for several months due to an oil spill.

C. The organization faces many challenges as compliance with labor laws, tax and financial regulations, intellectual property rights, and consumer protection is different for each country.

D. To avoid misunderstanding and conflict, the organization has invested time and resources in educating its employees on the distinct set of values and beliefs that guide behavior for each country in which they operate.

Answer (B) is correct.

Infrastructure, which includes the transportation network, the communications network, and utilities, would be considered economic issues. Economic issues in the global environment include the degrees of development and interconnections between countries.

A. International organizations must cope with different political systems. Governments may exercise greater oversight of, or even be hostile to, international firms. Additionally, organizations must cope with political risk, such as the risk of economic loss from politically motivated actions of governments, or political instability as may be reflected in changes in governments or violent acts.

C. Legal issues are complex in the international environment because of the substantial statutory and regulatory differences between countries. These differences may extend to taxation, financial regulation, labor law, consumer protections, and intellectual property rights.

D. Social and cultural differences may be even more difficult to resolve than economic, legal, and political issues. Culture is the distinct set of values, beliefs, and symbols that guide patterns of behavior in a group. In international business, misunderstandings and conflicts may occur because people from different cultures may have fundamentally different assumptions and values.

64. The permanent set of commitments by most of the world's countries designed to prohibit trade discrimination among members and between imported and domestic products is the

A. General Agreement on Tariffs and Trade (GATT).

B. North American Free Trade Agreement (NAFTA).

C. European Union (EU).

D. World Trade Organization (WTO) Agreement.

Answer (D) is correct.

The WTO Agreement is a successor to GATT, and is a permanent set of commitments by most of the world's countries designed to prohibit trade discrimination among members and between imported and domestic products. The WTO commenced in 1995 and is the largest international economic organization in the world.

65. Psychologist Geert Hofstede's research identified 5 distinct dimensions of cultural differences. Which of the following best demonstrates a high degree of collectivism?

A. Protection of members in return for their loyalty.

B. Tolerance for unpredictability and lack of structure.

C. Centrality of cooperation and relationships.

D. Personal steadiness and stability and respect for tradition.

Answer (A) is correct.

An organization protecting its members in return for their loyalty displays a high degree of the individualism-collectivism dimension. The individualism-collectivism dimension addresses the group versus the individual. A high degree of individualism-collectivism dimension includes (1) individuals that help one another and (2) an organization that protects its members in return for their loyalty. A low degree indicates that the individual must meet his or own security needs.

B. Tolerance for unpredictability and lack of structure indicates a low degree of the uncertainty avoidance dimension. Uncertainty avoidance relates to the extent of the threat posed by (1) ambiguous circumstances, (2) the significance of rules, and (3) the pressure for conformity.

C. The centrality of cooperation and relationships are feminine traits of the masculinity versus femininity dimension. The feminine (low) aspect of this dimension focuses on traditionally feminine traits such as (1) the centrality of cooperation, (2) relationships, (3) group decisions, and (4) quality of life.

D. Personal steadiness and stability and respect for tradition are short-term orientations of the long-term orientation versus short-term orientation dimension. Short-term orientation includes (1) reciprocating social obligations, (2) respect for tradition, (3) protecting one's "face," and (4) personal steadiness and stability.

66. Communication in high-context cultures includes all of the following characteristics except

A. Meaning is transmitted by nonverbal cues and situational circumstances.

B. Investing time in relationship-building is valued.

C. The emphasis of communication is on information exchange.

D. A person's status in a firm conveys the primary message.

Answer (C) is correct.

In low-context cultures, the emphasis of communication is on information exchange, transactions are more significant than relationships, and individuality is stressed more than the welfare of the group. Primary meanings are transmitted by words in low-context cultures. In high-context cultures, much meaning is transmitted by nonverbal cues and situational circumstances.

A. In high-context cultures, much meaning is transmitted by nonverbal cues and situational circumstances.

B. Investing time in relationship-building to establish trust and the welfare and harmony of the group are valued in a high-context culture.

D. In high-context cultures, a person's status in a firm, rank in society, and reputation convey the primary message.

PART-3 UNIT 2

Question: 1 Organizational charts often represent the formal structure of an organization. Often the organizational chart represents a pyramid with the chief executive on the top and the operating workforce on the bottom. Which of the following would not be included in a typical organizational chart?

- A. The span of control and the number of organizational levels.
- B. Communication channels.
- C. Promotional or career tracks.
- D. Informal influence or friendships.

Answer (D) is correct.

Organizational charts often show the formal relationships between employers and employees. However, a shortcoming of organizational charts is that they do not show informal relationships between the upper and lower levels of the corporate hierarchy.

A The span of control and the number of organizational levels is demonstrated by the pyramid. The chief executive at the top has the greatest control over the organization and then the levels of the pyramid show the number of organizational levels.

B The communication channels are often up the pyramid and are shown on the organizational chart.

C The higher levels of the pyramid are the levels that employees can be promoted to.

Question: 2 Which of the following concepts is not consistent with the classical perspective on management?

- A. Each subordinate should only have one superior.
- B. Superiors may have as many subordinates as possible within the superior's span of control.
- C. Employees may choose not to follow orders.
- D. The hierarchy of authority should be precisely defined.

Answer (C) is correct.

The humanistic perspective approached management by considering individual, social, and group needs and behaviors. One insight was that effective management may depend on employees' willing acceptance of authority. It is based on the acknowledgment that workers have free will and may decide not to follow orders.

A The unity of command principle states that each subordinate should only have one superior in order to prevent confusion and frustration.

B The unity of command principle states that a superior can have as many subordinates as (s)he can reasonably manage.

D The unity of objective principle requires that the hierarchy of authority should be precisely defined to pursue common objectives.

Question: 3 Although bureaucracy is often perceived negatively by the public, bureaucracy is a feature of nearly every large company. Which of the following is a sign that a bureaucracy is dysfunctional?

- A. A diversity of jobs.
- B. Rules that obscure responsibility.
- C. A large number of rules necessary for day to day operations.
- D. Obedience to authority.

Answer (B) is correct.

A sign that a bureaucracy is dysfunctional is the development of rules that are meaningless or that obscure accountability. A lack of accountability shows that the bureaucracy is ineffective at identifying the source problems and creating solutions to solve the problems.

A A diversity of jobs prevents employees from becoming bored with routine and unchallenging tasks.

C Many bureaucracies have rules to guide day-to-day operations. If the rules have a purpose, they do not create a dysfunctional environment.

D Obedience to authority is required for a corporation's operations to run smoothly. However, obedience at all costs is a sign that the bureaucracy is dysfunctional.

Question: 4 Which of the following is true with regard to the contingency perspective to solving problems within an organization?

- A. The organization's environment plays the largest role in finding situationally determined answers.
- B. The organization may be less adaptive when the environment is more uncertain.
- C. The organization should search for a solution that can be used in all cases.
- D. The contingency approach is a scientific management perspective.

Answer (A) is correct.

The contingency approach is that solutions are situationally determined. The key is finding the relevant factors in the organization's environment.

B The organization should be more adaptive when the environment is uncertain.

C No single design format fits all organizations and situations.

D The contingency approach searches for the solution appropriate to the organization's circumstances.

Question: 5 After 5 years of record sales, an organization saw its sales drop 40% when the demand for its product decreased. Desperate to save the organization, the owner made the decision to lay off 50% of the workforce. Which of the following is least likely to be an objective of the downsizing?

A. Reducing costs.

B. Improving efficiency.

C. Increasing market demand.

D. Increasing profits.

Answer (C) is correct.

The objectives of downsizing (e.g., reducing costs, improving efficiency, and increasing profits) are often not achieved. Many organizations follow cycles of hiring, firing, and rehiring that do not yield the expected benefits to offset the harm inflicted on terminated employees, the loss of morale of remaining employees, and the damage done to communities. Increasing market demand is least likely to be an objective of downsizing. The determinants of demand include consumer income, consumer taste and preference, prices of related goods, consumer expectations, and number of consumers.

A One of the objectives of downsizing is reducing costs.

B One of the objectives of downsizing is improving efficiency.

D One of the objectives of downsizing is increasing profits.

Question: 6 Which of the following is not true regarding why organizational effectiveness includes a time dimension?

A. To ignore long-term opportunities.

B. To meet expectations of employees and customers.

C. To be effective beyond the near term.

D. To learn, adapt, and develop.

Answer (A) is correct.

An organization needs to survive over a period of years. In the long term (5 years or more), the organization must survive an uncertain environment full of threats and opportunities. In the intermediate term (2-4 years), the organization must adapt to change and develop its capacities. In the near term (about 1 year), the organization needs to meet expectations of society, owners, employees, customers, and creditors. Long-term opportunities should be considered in the time dimension of achieving organizational effectiveness.

B An organization needs to meet expectations of society, owner, employees, customers, and creditors in the near term (about 1 year).

C An organization should be effective and efficient and continue to grow and be profitable beyond the near term.

D To be effective, an organization needs to learn, adapt, and develop over a period of years.

Question: 7 Management complacency can lead to all of the following except

- A. Organizational decline.
- B. Increased innovation due to high employee morale.
- C. Gradual loss of competitive edge.
- D. Not focusing on daily objectives.

Answer (B) is correct.

Management complacency is one of the main causes of organizational decline. The following are its characteristics:

1. A lack of innovation
2. Faulty perception of markets and competition
3. Failure to observe or properly appraise the initial warnings of decline
4. Not focusing on daily objectives

Therefore, management complacency can lead to a lack of innovation, not increased innovation.

A Organizational decline (inflexibility and loss of effectiveness and efficiency) can result from decreased demand, resource limitations, or mismanagement. Management complacency is one of the main causes of organizational decline.

C One characteristic of management complacency is the faulty perception of markets and competition, which can cause the organization to gradually lose its competitive edge.

D One characteristic of management complacency is not focusing on daily objectives.

Question: 8 Frederick Herzberg postulated a two-factor theory of human behavior that included satisfiers and dissatisfiers. Which of the following is a dissatisfier?

- A. Promotion to another position.
- B. Salary.
- C. Challenging work.
- D. Responsibility.

Answer (B) is correct.

Frederick Herzberg's two-factor theory of human behavior postulates that there are two classes of factors in the job situation. Maintenance of hygiene factors (dissatisfiers) are those the presence of which will not especially motivate people but the absence of which will diminish performance. These factors are extrinsic to the work itself. They include supervision, working conditions, interpersonal relations, salary, and status. Motivational factors (satisfiers) are those the absence of which will not diminish performance but the addition or availability of which will motivate employees. Intrinsic to the work itself, these include achievement, recognition, challenging work, advancement, growth in the job, and responsibility.

A Recognition and achievement are satisfiers.

B Challenging work is a satisfier.

D Responsibility is a satisfier.

Question: 9 An employee's self-actualization need would be met by

- A. Attractive pension provisions.
- B. Challenging new job assignments.
- C. Good working conditions.
- D. Regular positive feedback.

Answer (B) is correct.

Self-actualization is the highest level need in Maslow's hierarchy. It is the desire to become what one is capable of becoming, to realize one's potential and accomplish to the limit of one's ability. In other words, the job itself is an intrinsic motivation; no extrinsic motivation (such as rewards or reinforcements) is needed. Intrinsic motivation provides the worker with psychological income. Thus, challenging new job assignments meet an employee's self-actualization needs.

A Attractive pension provisions meet an employee's physiological needs.

C Good working conditions meet an employee's physiological needs.

D Regular positive feedback meets an employee's esteem needs.

Question: 10 An employee with a good background and years of experience earns a salary at the top of his or her range. Under the company's compensation program, the employee must earn a promotion in order to increase his or her salary above the usual annual increase. Which of the following is most likely to be an effect on the employee's behavior?

- A. The employee may refuse new duties or tasks.
- B. The employee may become less productive.
- C. The employee may not be motivated to improve performance.
- D. The employee may seek a position with another company.

Answer (D) is correct.

When an employee can earn a desired salary increase only through a promotion, (s)he is likely to be motivated to perform better. If this does not result in a promotion, (s)he will probably look for another job.

- A** This behavior would undermine the employee's chance for a promotion.
- B** This behavior would undermine the employee's chance for a promotion.
- C** This behavior would undermine the employee's chance for a promotion.

11. Maslow's theory of motivation is based on a hierarchy of human needs. The need satisfied by greater income is

- A. Self-actualization.
- B. Safety.
- C. Participation.
- D. Authority.

Answer (B) is correct.

Maslow saw human needs as a hierarchy and held that lower-level needs (physiological and safety needs) must be satisfied before higher-level needs (acceptance by peers, esteem, self-actualization) can influence the individual. Safety needs involve protection not only from physical harm but also from economic insecurity. Job and income security help to satisfy the need for safety.

A. According to Maslow, the highest need in the hierarchy is self-actualization. It is the desire to become what one is capable of becoming, to realize one's potential, and to accomplish to the limit of one's ability. Challenging work helps to satisfy this need.

C. Participation is not part of Maslow's hierarchy.

D. Authority is not part of Maslow's hierarchy.

12. Behavior modification is the management of environmental factors to encourage desirable behavior and to discourage undesirable behavior. Environmental factors include antecedents that

A. Reward each occurrence of a behavior.

B. Ignore a behavior.

C. Withdraw an unpleasant condition when a desired behavior occurs.

D. Encourage a given behavior.

Answer (D) is correct.

Antecedents are cues that encourage but do not cause a given behavior. Managing antecedents involves eliminating barriers to good performance and replacing them with helpful aids. Barriers include unattainable objectives, poor training, confusing rules, and conflicting directions from management. Aids include challenging but attainable objectives, clear instructions, realistic plans, constructive suggestions, and acceptable work rules.

A. Continuous reinforcement rewards every occurrence of a desirable new behavior.

B. Extinction discourages a behavior by ignoring it (not reinforcing it).

C. Negative reinforcement is the withdrawal of an existing unpleasant condition (such as a threat) when the desired behavior occurs.

13. Motivation is

A. The extent to which goal-specific performance is recognized by supervisors.

B. The extent to which individuals have the authority to make decisions.

C. The extent of the attempt to accomplish a specific goal.

D. The set of forces that stimulate enthusiasm and persistence.

Answer (D) is correct.

Motivation is the set of internal and external forces that stimulate enthusiasm to persist in a course of action. The ideal management action motivates subordinates by structuring situations and requiring behaviors that satisfy the needs of subordinates and the organization.

- A. Recognition of goal-specific performance is characteristic of a reward system.
- B. Autonomy is the extent to which individuals have the authority to make decisions.
- C. Goal congruence is the sharing of goals by supervisors and subordinates

14. Worker absenteeism, turnover, and error rates are likely to be greatest

- A. When workers alternate in performing different jobs.
- B. In simplified assembly-line jobs.
- C. In job sharing situations.
- D. When flexible working hours are provided.

Answer (B) is correct.

Although job satisfaction has an economic importance only indirectly related to productivity, satisfied workers tend to have lower rates of absenteeism, turnover, tardiness, apathy, and sabotage. Organizations with more organic or flexible organization structures may use more of the worker's skills and present a greater variety of work challenges, thus improving morale. Mass production technology usually involves repetitious, boring tasks.

- A. It should improve job satisfaction.
- C. It should improve job satisfaction.
- D. It should improve job satisfaction.

15. Job enrichment is a motivational approach used by management that

- A. Emphasizes the need for close supervision.
- B. Is based on Maslow's analysis of survival needs.
- C. Is based on Herzberg's analysis of factors extrinsic to the work.
- D. Applies the principle of worker participation.

Answer (D) is correct.

Job enrichment increases the scope of boring, repetitive tasks by using more of the employee's skills and allowing the employee more power to make decisions concerning the job, such as order of tasks, etc. Thus, it encourages worker participation in decisions previously made by management.

A. Job enrichment is based on the assumption that employees who have qualitatively improved jobs need less supervision.

B. Survival needs are at the bottom of Maslow's hierarchy. Job enrichment seeks to meet the higher-level needs (affiliation, esteem, self-actualization).

C. The intrinsic factors (challenge, growth, responsibility, etc.) are relevant to job enrichment.

16. Job enlargement is characterized by

A. Horizontal loading of the job.

B. Vertical loading of the job.

C. Increased worker control of tasks.

D. More rapid performance feedback.

Answer (A) is correct.

Job enlargement is primarily intended to reduce boredom in repetitive or fast-paced jobs through the assignment of a variety of simple tasks as part of one job. Such jobs are horizontally loaded.

B. Vertical loading is a term used in management literature to describe qualitative job enhancement (enrichment). It entails greater control and responsibility and increased chances for growth.

C. It is typical of job enrichment.

D. It is typical of job enrichment.

17. A company that formerly paid certain management employees on a salary plus commission basis decided to compensate a test group solely with commissions. Performance of these employees declined. The most likely explanation for this result is that

A. The employee received special attention.

B. Compensation was a motivational factor.

C.Compensation was not a hygiene factor.

D.Increased concerns about security made the employees risk averse.

Answer (D) is correct.

A straight salary with commissions rewarded increased efforts while providing greater security and a reduction in anxiety. Satisfaction of the need for security may have permitted the employees to adopt promising and profitable but more risky strategies. Because people concerned about security needs tend to be risk averse, the change in compensation method probably caused the performance decline.

A.The famous Hawthorne studies suggest that the employees' knowledge of their special status would improve their output.

B.Herzberg defines a motivational factor as one whose absence will not diminish performance but whose presence will be a motivator.

C.A performance decline followed a reduction in the security of compensation; hence, money was probably a hygiene (maintenance) factor according to Herzberg's two-factor theory of motivation.

18.A company's compensation program does not allow for salary increases based on above-average performance after an employee reaches the top of a position's salary range. It also pays some employees higher salaries because of their educational qualifications. This company could improve the program by

A.Allowing each manager to set up his or her own system of salary increases.

B.Providing only monetary compensation.

C.Developing a system that equates years of experience with education.

D.Decreasing the annual percentage increase in each salary range.

Answer (C) is correct.

A company with a compensation program that stops rewarding above-average performance at the top of each salary range and rewards education with higher compensation could improve the system in several ways. These include starting a bonus program for above-average performance, refusing to hire a person at the top of a salary range unless (s)he will be promoted quickly, and equating experience and education so that employees are treated fairly.

A.The company should administer a uniform system of salary increases.

B.The company could improve its system if it provided other compensation, such as assisting with an employee's tuition or recognizing an employee who has given many years of service.

D.The company would please all employees by increasing this percentage.

19. Which of the following is a management approach to motivating employees?

- 1. Providing performance feedback.**
- 2. Presenting opportunities for responsibility.**
- 3. Satisfying personal needs.**

A. 3 only.

B. 1 and 2 only.

C. 2 and 3 only.

D. 1, 2, and 3.

Answer (D) is correct.

Performance feedback is an important part of goal-based approaches to motivating employees. Moreover, presenting opportunities for responsibilities will motivate employees by helping them meet the personal need for achievement. Thus, satisfying personal needs is a method of motivating employees. Many motivational theories are based on analysis of employee needs.

A. Management approaches to motivation also include providing performance feedback and presenting opportunities for responsibility.

B. Management approaches to motivation also include satisfying personal needs.

C. Management approaches to motivation also include providing performance feedback.

20. Victor Vroom's expectancy theory is based on the intuitively appealing idea that people have expectations of rewards derived from their unique personal motive structure, from their beliefs as to what are important rewards to them, and from their expectations of getting these incentives if they exert effort. The perceived equity of rewards leads to satisfaction or dissatisfaction and thus feeds into the next cycle's expectancies. For example, an employee who believes (s)he is compensated less than another worker performing the same task with the same degree of skill may become dissatisfied. An important concept in expectancy theory is

- A.Theory X and Theory Y.
- B.Motivation = Valence × Expectancy.
- C.The two-factor theory of behavior.
- D.The management grid.

Answer (B) is correct.

Victor Vroom's expectancy theory holds that the force with which an individual is motivated is a function of the valence of a motivator (whether it has a positive or negative value to the individual) and the expectancy, which is that individual's estimation of the probability that a particular action will lead to a desired outcome. Thus, motivation equals the valence times the expectancy.

- A.Theory X and Theory Y were used by McGregor to signify the extremes of managers' beliefs about employee conduct.
- C.Herzberg believed that maintenance factors (such as wages) must be present to avoid diminished performance but that motivational factors (such as challenge and recognition) are necessary to stimulate better performance.
- D.The grid approach arrays two dimensions of managing (concern for production and concern for people) on a 9 × 9 grid.

21.Which of the following tactics may employees use when feeling that their individual power is insignificant?

- A.Employees may engage in posturing by taking credit for the work of a coworker.
- B.Employees may engage in destructive competition by spreading false rumors.
- C.Employees may engage in creating power and loyalty cliques with other coworkers.
- D.Employees may attempt to conceal errors made by a supervisor in order to aid their own future advancement within the corporation.

Answer (C) is correct.

Employees will often form groups when they feel their collective bargaining power is greater than the power of an individual.

- A.Posturing is the attempt to make a good impression and is often used when an individual feels his or her power is adequate.

B.Engaging in destructive competition does not reveal that an individual feels his or her power is insignificant.

D.Concealing errors by an employee demonstrates that (s)he feels his or her power is great enough to hide errors and not get caught.

22.The organizational culture may encourage politics by creating unreasonable obstacles to group and individual advancement. Which type of political tactic involves taking credit for another person's work?

A.Loyalty cliques.

B.Destructive competition.

C.Empire building.

D.Posturing.

Answer (D) is correct.

Posturing is an attempt to make a good impression, for example, by taking credit for others' work or seeking to stay one jump ahead of a rival.

A.Creating power and loyalty cliques is a tactic based on the premise that a cohesive group has more power than an individual.

B.Engaging in destructive competition includes activities such as gossip, lying, and sabotage.

C.Empire building is an attempt to control greater resources. A manager who supervises many employees may feel more secure and influential.

23.Which one of the following is generally not beneficial to group-aided decision making in an organization?

A.More information.

B.Acceptance.

C.More knowledge.

D.Dominant members.

Answer (D) is correct.

Group-aided decision making, such as by committee, works better when the committee is small and the members accept each other as contributing parts of the group. A dominant member is not desirable. The chair should act as a moderator and not be considered threatening or overbearing by the other members.

- A. A group decision, like an individual decision, is better when based on sufficient information.
- B. Acceptance of each member of the committee and the goals of the committee is essential.
- C. The more knowledge that group members possess, the better the decision is likely to be.

24. Which of the following is not an advantage of group decision making as compared to individual decision making?

- A. Groups obtain an increased degree of acceptance of a solution so that it may be more easily implemented.
- B. Group decision making is consistent with democratic methods.
- C. Group members bring more complete information and knowledge into the decision process.
- D. Group members avoid expressing opinions that deviate from what appears to be the group consensus.

Answer (D) is correct.

The groupthink phenomenon is undesirable, whether a group makes the decision or aids the decision maker. Groupthink occurs when group members accept what appears to be the group consensus rather than giving their honest input. The result may be decisions with which some members of the group are not happy.

- A. If members of the group are responsible for the decision making, their participation in the implementation process will increase the ease with which the decisions are carried out.
- B. Group decision making adds legitimacy to the solution by following democratic methods.
- C. A group possesses greater resources than an individual.

25. Which of the following statements about group decision making is most likely false?

- A. There is a lack of responsibility for group decisions.
- B. Group decision making is almost always less efficient than individual decision making.

C.The desire by individual members to be accepted by the group often restrains open disagreement.

D.Group decision making tends to be less creative than individual decision making.

Answer (D) is correct.

Groups tend to be more creative than individuals because diversity of member views generally results in the consideration of more alternatives for solving a problem (but the social pressure to conform also may inhibit creativity).

A.Individuals do not accept responsibility for group decisions.

B.Group decision making almost always takes more time than individual decision making, except when the need for diverse views is so great that an individual decision maker needs to consult many people or perform research.

C.Group members generally have diverse views, but their common need to be accepted and respected by the group often restrains the full, open expression of their views when they fear strong disagreement.

26.Which of the following is not true with regard to informal groups?

A.Members of the group are susceptible to group pressure.

B.The groups develop primarily to satisfy esteem needs.

C.Almost all employees and managers are members of an informal group.

D.Informal groups tend to be small and have simple relationships.

Answer (D) is correct.

Informal groups tend to be small and are often very complex. They develop their own leaders and usually result from the frequent interaction among individuals in the course of their work.

A.Group pressure is often a major characteristic of informal groups, and the pressure is often hard to resist because members seek acceptance from the group.

B.Informal groups often form to establish friendships, which satisfy esteem needs.

C.Almost everyone in an organization forms some type of friendship or other informal relationship with others in the organization.

27. Formal groups are work groups within the organization assembled to perform a productive activity. How is a formal group similar to an informal group?

- A. Membership in both informal and formal groups tends to be permanent.
- B. Informal and formal groups develop their own leaders to fill the needs of the group.
- C. Informal and formal groups usually provide social satisfaction that supplements job satisfaction.
- D. Informal and formal groups are based on the organization's purpose and needs.

Answer (C) is correct.

The use of groups in organizations has often led to a higher degree of social satisfaction because members feel that they have contributed to a part of the group and gained the acceptance of their peers. Both informal and formal groups usually provide an employee with greater job satisfaction than the employee would otherwise have on his or her own.

- A. Membership in formal groups is relatively more permanent than in informal groups.
- B. Formal groups have explicitly designated leaders with authority while informal groups develop their own leaders.
- D. Formal groups are formed based upon an organization's purpose and needs. Informal groups are often developed by the employees of the organization without regard to the organization's purpose or needs.

28. Which of the following is true with regard to norms?

- A. Norms are similar from culture to culture.
- B. Norms reinforce the group's values and common identity.
- C. Norms cannot be enforced by ridicule or criticism.
- D. Norms are often written in an organization's policy manual.

Answer (B) is correct.

Norms often provide a common identity for a group. Members feel they are part of a cohesive group with members who also share the same values.

- A. Norms vary from culture to culture.
- C. Enforcement of norms in the negative sense may be done with ridicule and criticism.

D.Norms are often unwritten.

29.Groups have often evolved by self-set standards of performance and behavior, usually based on the personal and social backgrounds of the individuals on the job. This establishment of a group culture is referred to as developing

A.Role models.

B.Cohesiveness.

C.Conformity.

D.Norms.

Answer (D) is correct.

Norms are the standards of behavior adopted by a group when it is in its early stages. The norms of the group are often a composite of the personal and social backgrounds of the individuals who comprise the group.

A.Role models set an example for other employees to follow, but role models are not usually responsible for establishing the culture of a group.

B.Cohesiveness is the tendency of members to adhere to the group and unite against outside pressures.

C.Conformity involves complying with the prevailing role expectations and norms of a group.

30.A lack of cohesiveness and attractiveness in a group may lead to

A.A lack of commitment by the members.

B.Dissension in the formal organization.

C.Cooperation among group members.

D.Substantial group member interaction.

Answer (A) is correct.

Commitment to a group depends on the group's attractiveness and cohesiveness. A lack of commitment may lead to members joining other groups and bad experiences with the group.

B.Dissension in the formal organization would be too extreme for a single group to cause.

C.The opposite is likely to happen. A lack of cohesiveness and attractiveness will most likely make group members cooperate less.

D.Group member interaction will most likely decrease as members consider joining other groups or become frustrated with the group.

31.Conformity is

A.Compliance with roles and norms.

B.The tendency of individuals to ignore input that varies from the group opinion.

C.A favorable view from the outside.

D.The tendency of members to adhere to the group and unite against outside pressures.

Answer (A) is correct.

Conformity is compliance with roles and norms. Its benefit is predictable behavior. Its cost may be illegal, unethical, or incompetent behavior.

B.Group-think is the tendency of individuals committed to the group to ignore input that varies from the group opinion.

C.Group attractiveness is a favorable view from the outside.

D.Group cohesiveness is the tendency of members to adhere to the group and unite against outside pressures.

32.The prevailing view of whistleblowing (i.e., reporting unethical or illegal conduct to internal or external parties) is that it is

A.An act of revenge.

B.Negative political behavior.

C.A net social good.

D.Financially motivated.

Answer (C) is correct.

The prevailing view is that whistleblowing is a net social good. Revealing unethical behavior may be the only way to end misconduct that has substantial negative effects on the public interest.

- A. While some managers believe whistleblowing to be an act of revenge that is disloyal to the organization, it is not the prevailing view of whistleblowing.
- B. While some managers consider whistleblowing to be negative political behavior, it is not the prevailing view of whistleblowing.
- D. While some whistleblowers may have personal financial motives, it is not the prevailing view of whistleblowing.

33. A healthcare employee filed a complaint against his employer for failure to follow OSHA guidelines for safe patient handling. The behavior of the employee would be considered

- A. Whistleblowing.
- B. Positive political behavior.
- C. Illegal.
- D. Impression management.

Answer (A) is correct.

Whistleblowing is the reporting of entity misconduct to internal or external parties. The healthcare employee filed a complaint against his employer (either internally or externally) regarding unsafe practices or misconduct.

- B. Positive political behaviors include coalition building, networking, and seeking mentors.
- C. Exposure of wrongdoing or illegal behavior is protected by many governments. These protection statutes prohibit retaliation against insiders who appropriately disclose wrongdoing.
- D. Impression management (organizational politics) is acting in self-interest given actual or perceived opposition in the workplace.

34. Which one of the following statements pertaining to the return on investment (ROI) as a performance measurement is false?

- A. When the average age of assets differs substantially across segments of a business, the use of ROI may not be appropriate.
- B. ROI relies on financial measures that are capable of being independently verified, while other forms of performance measures are subject to manipulation.
- C. The use of ROI may lead managers to reject capital investment projects that can be justified by using discounted cash flow models.

D.The use of ROI can make it undesirable for a skillful manager to take on troubleshooting assignments such as those involving turning around unprofitable divisions.

Answer (B) is correct.

ROI is calculated by dividing a segment's income by the invested capital. Thus, ROI can be manipulated by falsifying income or invested capital.

A.ROI can be misleading when the quality of the investment base differs among segments.

C.Managers may reject projects that are profitable (a return greater than the cost of capital) but decrease ROI. For example, the manager of a segment with a 15% ROI may not want to invest in a new project with a 10% ROI, even though the cost of capital might be only 8%.

D.The use of ROI does not reflect the relative difficulty of tasks undertaken by managers.

35.Charlie's Service Co. is an automobile service center. For the month of June, Charlie's had the following operating statistics:

Sales	US \$750,000
Operating income	50,000
Net profit after taxes	6,000
Total assets available	700,000
Shareholders' equity	300,000
Cost of capital	8%

Charlie's has a

A.Return on investment of 6.67%.

B.Residual income of US \$(6,000).

C.Return on investment of 8%.

D.Residual income of US \$(10,000).

Answer (B) is correct.

Residual income is the excess of operating income (a pretax amount) over a targeted amount equal to an imputed interest charge on invested capital. Using total assets available as the investment base, Charlie's targeted amount is US \$56,000 ($\$700,000 \text{ total assets} \times 8\% \text{ cost of capital}$). Subtracting this amount from operating income results in residual income of US \$(6,000).

A.The return on sales is 6.67% ($\text{US } \$50,000 \div \$750,000$).

C.The cost of capital is 8%.

D.Residual income of US \$(10,000) results from improperly subtracting weighted sales rather than weighted assets.

36. Avionics Industrials reported at year end that operating income before taxes for the year equaled US \$2,400,000. The firm's weighted-average cost of capital (WACC) is 7.24%. The carrying amount of debt is US \$1,300,000, and the carrying amount of equity capital is US \$8,800,000. The income tax rate for Avionics is 30%. What is the economic value added (EVA)?

A.US \$731,240

B.US \$948,760

C.US \$1,668,760

D.US \$1,680,000

Answer (B) is correct.

EVA equals after-tax operating income minus the product of the weighted-average cost of capital (WACC) and the investment base. After-tax operating income equals operating income multiplied by 1 minus the tax rate, or US \$1,680,000 [$\$2,400,000 \times (1 - .3)$]. The investment base is US \$10,100,000, consisting of US \$1,300,000 of debt and US \$8,800,000 of equity. Thus, EVA equals US \$948,760 [$\$1,680,000 - (\$10,100,000 \times 0.0724)$].

A.The cost of capital is US \$731,240.

C.Income taxes must be subtracted from operating income to compute EVA.

D.The after-tax operating income is US \$1,680,000.

37. Selected information for Dayan Company is as follows:

December 31,

	Year 5	Year 6
Preferred stock, 8%, par US \$100, nonconvertible,		
Noncumulative	US \$125,000	US \$125,000
Common stock	300,000	400,000
Retained earnings	75,000	185,000
Accumulated other		
comprehensive income	0	40,000
Dividends paid on preferred		
stock for year ended	10,000	10,000
Net income for year ended	60,000	120,000

Dayan's return on common equity, rounded to the nearest percentage point, for Year 6 is

- A.16%
- B.17.6%
- C.22%
- D.24%

Answer (C) is correct.

Return on common equity is equal to the earnings available to common shareholders divided by the average common equity. The numerator is therefore net income (US \$120,000) minus preferred dividends (US \$125,000 × 8% = \$10,000), that is, US \$110,000. Average common equity is equal to the average of beginning and ending common equity, or US \$500,000 [(US \$375,000 + \$625,000) ÷ 2]. Beginning common equity is US \$375,000 (\$300,000 common stock + \$75,000 retained earnings). In Year 6, accumulated other comprehensive income is an addition to common equity. Accordingly, ending common equity is US \$625,000 (\$400,000 common stock + \$185,000 retained earnings + \$40,000 accumulated other comprehensive income). Return on common equity equals 22% (US \$110,000 ÷ \$500,000).

- A.A return of 16% results from dividing net income for Year 6 by total ending equity.
- B.A return of 17.6% results from using ending, not average, equity in the denominator.
- D.A return of 24% results from using net income, not earnings available to common shareholders, in the numerator.

38. Which measures would be useful in evaluating the performance of a manufacturing system?

- I. Throughput time
- II. Total setup time for machines/total production time
- III. Number of rework units/total number of units completed

A. I and II only.

B. II and III only.

C. I and III only.

D. I, II, and III.

Answer (D) is correct.

Throughput time is the average amount of time required to convert raw materials into finished goods ready to be shipped. Total setup time as a percentage of total production time provides valuable information for scheduling. The number of rework items as a percentage of total number of units completed provides efficiency and quality control data. These are all important factors in evaluating the performance of a manufacturing system.

A. All three measures are important in evaluating the performance of a manufacturing system.

B. All three measures are important in evaluating the performance of a manufacturing system.

C. All three measures are important in evaluating the performance of a manufacturing system.

39. Which of the following performance measures is nonfinancial?

A. Percentage of defective products.

B. Return on investment.

C. Gross profit margin.

D. Economic value added.

Answer (A) is correct.

Of the choices provided, percentage of defective products is the only one whose calculation does not involve a monetary amount.

B. Return on investment is calculated using monetary amounts and is thus a financial performance measure.

C. Gross profit margin is calculated using monetary amounts and is thus a financial performance measure.

D. Economic value added is calculated using monetary amounts and is thus a financial performance measure.

40. The following selected data pertain to the Darwin Division of Bagle Co. for the year just ended:

Sales	US \$400,000
Operating income\$	40,000
Capital turnover	4
Imputed interest rate	10%

What was Darwin's residual income for the year?

A. US \$0

B. US \$4,000

C. US \$10,000

D. US \$30,000

Answer (D) is correct.

Residual income equals operating income minus a target return on invested capital. Since the capital turnover equals sales divided by average invested capital, average invested capital is US \$100,000 (\$400,000 sales ÷ 4 capital turnover). Residual income can now be calculated as follows:

$$\begin{aligned}\text{Residual income} &= \text{Operating income} - \text{Target return on invested capital} \\ &= \text{US } \$40,000 - (\text{US } \$100,000 \times 10\%) \\ &= \text{US } \$40,000 - \$10,000 \\ &= \text{US } \$30,000\end{aligned}$$

- A. Residual income is US \$30,000.
- B. Operating income times the imputed interest rate is US \$4,000.
- C. The target return on invested capital is US \$10,000.

41. Division B has operating income of US \$400 and total assets of US \$1,600. The required rate of return for the company is 10%. The company's residual income would be which of the following amounts?

- A. US \$0
- B. US \$260
- C. US \$640
- D. US \$900

Answer (C) is correct.

The company's total residual income can be calculated as follows:

$$\begin{aligned}
 \text{Residual income} &= \text{Operating income} - \text{Target return on invested capital} \\
 &= (\text{US } \$500 + \$400) - [(\$1,000 + \$1,600) \times 10\%] \\
 &= \text{US } \$900 - \$260 \\
 &= \text{US } \$640
 \end{aligned}$$

- A. Operating income exceeds target return on invested capital.
- B. The required return is \$260.
- D. Operating income is US \$900.

42. Minon, Inc., purchased a long-term asset on the last day of the current year. What are the effects of this purchase on return on investment and residual income?

Return on	Residual
<u>Investment</u>	<u>Income</u>
A.Increase	Increase
B.Decrease	Decrease
C.Increase	Decrease
D.Decrease	Increase

Answer (B) is correct.

ROI equals operating income divided by average invested capital. The purchase of a long-term asset on the last day of the fiscal year has little or no effect on net income. But it increases average invested capital, thereby decreasing ROI. Residual income is operating income minus a target return on average invested capital. Given no change in operating income or the required rate of return, an increase in invested capital decreases residual income.

A.ROI and residual income decrease.

C.ROI decreases.

D.Residual income decreases.

43.Vested, Inc., made some changes in operations and provided the following information:

	<u>Year 2</u>	<u>Year 3</u>
Operating revenues	US \$ 900,000	US \$1,100,000
Operating expenses	650,000	700,000

	<u>Variable</u>	<u>Fixed</u>
Direct materials	US \$200,000	
Direct labor	150,000	
Factory overhead	70,000	US \$42,000
General, selling, and Administrative	<u>30,000</u>	<u>48,000</u>
Totals	<u>US \$450,000</u>	<u>US \$90,000</u>

During the year, Rho produced 300,000 units of industrial photo prints, which were sold for US \$2.00 each. Oslo's investment in Rho was US \$500,000 and US \$700,000 at January 1 and December 31, respectively. Oslo normally imputes interest on investments at 15% of average invested capital.

Q. Assume that net operating income was US \$60,000 and that average invested capital was US \$600,000. For the year ended December 31, Rho's residual income (loss) was

- A. US \$150,000
- B. US \$60,000
- C. US \$(45,000)
- D. US \$(30,000)

Answer (D) is correct.

Rho's residual income can be calculated as follows:

$$\begin{aligned}
 \text{Residual income} &= \text{Operating income} - \text{Target return on invested capital} \\
 &= \text{US } \$60,000 - (\$600,000 \times 15\%) \\
 &= \text{US } \$60,000 - \$90,000 \\
 &= \text{US } \$30,000 \text{ loss}
 \end{aligned}$$

- A.The target return on invested capital should not be added to net operating income.
- B.The target return on invested capital needs to be deducted from net operating income.
- C.This figure is based on a 17.5% imputed interest.

45.Fact Pattern:

Oslo Co.'s industrial photo-finishing division, Rho, incurred the following costs and expenses during the year just ended:

Variable	Fixed	
Direct materials	US \$200,000	
Direct labor	150,000	
Factory overhead	70,000	US \$42,000
General, selling, and		
Administrative	30,000	48,000
Totals	US \$450,000	US \$90,000

During the year, Rho produced 300,000 units of industrial photo prints, which were sold for US \$2.00 each. Oslo's investment in Rho was US \$500,000 and US \$700,000 at January 1 and December 31, respectively. Oslo normally imputes interest on investments at 15% of average invested capital.

For the year ended December 31, Rho's return on average investment was

- A.15.0%**
- B.10.0%**
- C.8.6%**
- D.(5.0%)**

Answer (B) is correct.

Rho's return on average investment can be calculated as follows:

ROI=Operating income ÷ Average invested capital

$$=[(300,000 \text{ units} \times \text{US } \$2) - \$450,000 - \$90,000] \div [(\$500,000 + \$700,000) \div 2]$$

$$=\text{US } \$60,000 \div \$600,000$$

$$=10\%$$

A.Fifteen percent is the imputed rate.

C.This figure results from operating income divided by the year-end invested capital of US \$700,000.

D.This percentage equals the residual loss (US \$30,000) divided by average invested capital.

46.What is the primary disadvantage of using return on investment (ROI) rather than residual income to evaluate the performance of investment center managers?

A.ROI is a percentage, while residual income is a dollar amount.

B.ROI may lead to rejecting projects that yield positive cash flows.

C.ROI does not necessarily reflect the company's cost of capital.

D.ROI does not reflect all economic gains.

Answer (B) is correct.

A serious drawback of relying on ROI is the temptation to reject capital projects that would decrease the ROI percentage in spite of the fact that they would increase shareholder wealth. Management tends to reject any capital project that would decrease current ROI even if it would add to the company's bottom line. Residual income is often considered superior because dealing with absolute dollars rather than percentages forces management to consider all decisions in the light of increasing shareholder wealth, not just historical percentage returns.

A.Expressing ROI as a percentage is not in itself a primary disadvantage. For example, residual income is based on an imputed ROI.

C.ROI may reflect the company's cost of capital. For example, using net income as the numerator takes into account interest expense from debt incurred to purchase assets.

D.Failing to use an income measure that reflects all economic gains also is a possible disadvantage of residual income.

47. The following information pertains to Bala Co. for the year ended December 31:

Sales	US \$600,000
Income	100,000
Capital investment	400,000

Which of the following equations should be used to compute Bala's return on investment?

- A. $(4/6) \times (6/1) = \text{ROI}$.
- B. $(6/4) \times (1/6) = \text{ROI}$.
- C. $(4/6) \times (1/6) = \text{ROI}$.
- D. $(6/4) \times (6/1) = \text{ROI}$.

Answer (B) is correct.

ROI equals capital turnover (sales \div investment) times the profit margin (income \div sales). Thus, Bala's ROI can be represented by $[(\text{US } \$600,000 \div \$400,000) \times (\$100,000 \div \$600,000)]$.

- A. The ROI yielded is 400%, which is the reciprocal of the true ROI of 25%.
- C. Capital turnover is sales divided by investment, not investment divided by sales.
- D. Profit margin is income divided by sales, not sales divided by income.

48. Galax, Inc., had operating income of US \$5,000,000 before interest and taxes. Galax's net book value of plant assets at January 1 and December 31 were US \$22,000,000 and US \$18,000,000, respectively. Galax achieved a 25% return on investment for the year, with an investment turnover of 2.5. What were Galax's sales for the year?

- A. US \$55,000,000
- B. US \$50,000,000
- C. US \$45,000,000
- D. US \$20,000,000

Answer (B) is correct.

The capital (investment) turnover ratio equals sales divided by average invested capital. Sales equals the capital turnover ratio of 2.5 times average invested capital of US \$20,000,000 $[(\$22,000,000 + \$18,000,000) \div 2]$. Galax's sales are therefore US \$50,000,000.

- A. The amount of US \$55,000,000 equals investment turnover times beginning plant assets.
- C. The amount of US \$45,000,000 equals investment turnover times ending plant assets
- D. The amount of US \$20,000,000 equals the average plant assets.

49. Wexford Co. has a subunit that reported the following data for Year 1:

Asset (investment) turnover	1.5 times
Sales	US \$750,000
Return on sales	8%

The imputed interest rate is 12%. What is the division residual income for Year 1?

- A. US \$60,000
- B. US \$30,000
- C. US \$20,000
- D. US \$0

Answer (D) is correct.

Residual income is the excess of operating income over a target return on invested capital. Because return on sales is the ratio of operating income to sales, Wexford has operating income of US \$60,000 ($\$750,000 \text{ sales} \times 8\% \text{ return on sales}$). The target return on invested capital equals invested capital times the imputed interest rate. Invested capital is US \$500,000 ($\$750,000 \text{ sales} \div 1.5 \text{ asset turnover}$), so the target return on capital is US \$60,000 ($\$500,000 \text{ capital} \times 12\% \text{ imputed interest}$). Thus, Wexford's residual income is US \$0 ($\$60,000 \text{ operating income} - \$60,000 \text{ target return on capital}$).

- A. The amount of US \$60,000 is the operating income.
- B. The amount of US \$30,000 is the difference between sales and investments, times the imputed interest rate.
- C. The amount of US \$20,000 is the difference between sales and investments multiplied by the percentage return on sales.

50. Which of the following ratios would be used to evaluate a company's profitability?

- A. Current ratio.
- B. Inventory turnover ratio.
- C. Debt-to-total assets ratio.
- D. Gross margin ratio.

Answer (D) is correct.

The gross margin ratio is the ratio of sales minus cost of goods sold to sales. It is a profitability ratio that measures the percentage of sales earned after incurring direct costs of goods and services.

- A. The current ratio measures liquidity
- B. The inventory turnover ratio measures the efficiency of the entity's management of inventory.
- C. The debt-to-total assets ratio reports the total debt burden carried by a company per dollar of asset. It measures solvency.

51. Residual income is a better measure for performance evaluation of an investment center manager than return on investment because

- A. The problems associated with measuring the asset base are eliminated.
- B. Desirable investment decisions will not be neglected by high return divisions.
- C. Only the gross book value of assets needs to be calculated.
- D. Returns do not increase as assets are depreciated.

Answer (B) is correct.

A disadvantage of ROI is potential rejection of projects that decrease ROI despite increasing shareholder value. Residual income often is preferable because a firm ultimately is most interested in the total monetary amount of an investment's return.

- A. The investment base must be determined before calculating the target return.
- C. The investment base may be defined in various ways.

D.ROI returns will be affected in the same manner as the target return.

52.A firm earning a profit can increase its return on investment by

- A.Increasing sales revenue and operating expenses by the same dollar amount.
- B.Decreasing sales revenues and operating expenses by the same percentage.
- C.Increasing investment and operating expenses by the same dollar amount.
- D.Increasing sales revenues and operating expenses by the same percentage.

Answer (D) is correct.

ROI equals income divided by invested capital. If a firm is profitable, increasing sales and expenses by the same percentage increases ROI. For example, if a company has sales of US \$100 and expenses of US \$80, its net income is US \$20. Given invested capital of US \$100, ROI is 20% ($\text{US } \$20 \div \100). If sales and expenses both increase 10% to US \$110 and US \$88, respectively, net income increases to US \$22. ROI then is 22% ($\text{US } \$22 \div \100).

- A.Increasing sales and expenses by the same dollar amount does not change income or ROI.
- B.Decreasing revenues and expenses by the same percentage reduces income and ROI.
- C.Increasing investment and operating expenses by the same dollar amount reduces ROI. The higher investment increases the denominator, and the increased expenses reduce the numerator.

53.One approach to measuring divisional performance is return on investment. Return on investment is expressed as operating income

- A.Divided by the current year's capital expenditures plus cost of capital.
- B.Minus imputed interest charged for invested capital.
- C.Divided by average fixed assets.
- D.Divided by average total assets.

Answer (D) is correct.

ROI is calculated by dividing income by average invested capital. It is a key performance measure of an investment center. Invested capital may be defined in various ways, such as shareholders' equity, total assets available, or total assets employed, which excludes idle assets. Total assets available is the measure that assumes the manager uses all assets without regard to financing.

- A. ROI is based on all assets, not just current investment expenditures.
- B. The calculation of ROI does not adjust for imputed interest on invested capital.
- C. The denominator is not limited to fixed assets.

54. The imputed interest rate used in the residual income approach to performance evaluation can best be described as the

- A. Average lending rate for the year being evaluated.
- B. Historical weighted-average cost of capital for the company.
- C. Target return on investment set by the company's management.
- D. Average return on investments for the company over the last several years.

Answer (C) is correct.

Residual income is the excess of operating income over a targeted amount equal to an imputed interest charge on invested capital. The rate used ordinarily is set as a target return by management but is often equal to the weighted average cost of capital.

- A. The cost of equity capital also must be included in the imputed interest rate.
- B. The current weighted-average cost of capital must be used.
- D. The rate should be based on cost of capital, not investment returns of preceding years.

55. REB Service Co. is a computer service center. For the month, REB had the following operating statistics:

Sales	US \$450,000
Operating income	25,000
Net profit after taxes	8,000
Total assets	500,000
Shareholders' equity	200,000
Cost of capital	6%

Based on the above information, which one of the following statements is true? REB has a

- A. Return on investment of 4%.
- B. Residual income of US \$(5,000).
- C. Return on investment of 1.6%.
- D. Residual income of US \$(22,000).

Answer (B) is correct.

Residual income is the excess of operating income (a pretax amount) over a targeted amount equal to an imputed interest charge on invested capital. Using assets of US \$500,000 as the investment base and a cost of capital of 6%, REB must earn US \$30,000 on those assets to cover the cost of capital. Given that operating income was only US \$25,000, residual income is US \$(5,000).

- A. Although the firm's return on equity investment was 4%, its return on all funds invested was 5% (US \$25,000 pretax operating income \div \$500,000).
- C. ROI is commonly based on before-tax income.
- D. Residual income of US \$(22,000) results from improperly using after-tax, rather than pretax, profit.

56.Fact Pattern: Edith Carolina, president of the Deed Corporation, requires a minimum return on investment of 8% for any project to be undertaken by her company. The company is decentralized, and leaves investment decisions up to the discretion of the division managers as long as the 8% return is expected to be realized. Michael Sanders, manager of the Cosmetics Division, has had a return on investment of 14% for his division for the past 3 years and expects the division to have the same return in the coming year. Sanders has the opportunity to invest in a new line of cosmetics that is expected to have a return on investment of 12%.

Q.If the Deed Corporation evaluates managerial performance using residual income based on the corporate minimum required rate of return, what will be the preference for taking on the proposed cosmetics line by Edith Carolina and Michael Sanders?

<u>Carolina</u>	<u>Sanders</u>
A.Accept	Reject
B.Reject	Accept
C.Accept	Accept
D.Reject	Reject

Answer (C) is correct.

Residual income is the excess of operating income over a targeted amount equal to an imputed interest charge on invested capital (in this case, 8%). Using a percentage ROI approach, expansion might be rejected if it lowered ROI, even though residual income would increase. Using residual income, both Carolina and Sanders would accept the new project because residual income will increase if a 12% return is earned when the target ROI is only 8%.

- A.Sanders would also accept the project.
- B.Carolina would also accept the project.
- D.Both Sanders and Carolina would accept the project.

57.Fact Pattern: Edith Carolina, president of the Deed Corporation, requires a minimum return on investment of 8% for any project to be undertaken by her company. The company is decentralized, and leaves investment decisions up to the discretion of the division managers as long as the 8% return is expected to be realized. Michael Sanders, manager of the Cosmetics Division, has had a return on investment of 14% for his division for the past 3 years and expects the division to have the same return in the coming year. Sanders has the opportunity to invest in a new line of cosmetics that is expected to have a return on investment of 12%.

If the Deed Corporation evaluates managerial performance using return on investment, what will be the preference for taking on the proposed cosmetics line by Edith Carolina and Michael Sanders?

<u>Carolina</u>	<u>Sanders</u>
A.Accept	Reject
B.Reject	Accept
C.Accept	Accept
D.Reject	Reject

Answer (A) is correct.

A company with an 8% ROI threshold should obviously accept a project yielding 12% because the company's overall ROI would increase. The manager being evaluated on the basis of ROI who is already earning 14% will be unwilling to accept a 12% return on a new project because the overall ROI for the division would decline slightly. This absence of goal congruence suggests a weakness in ROI-based performance evaluation.

B. Carolina would accept a project yielding a return greater than 8%, and Sanders would reject a return yielding less than 14%.

C. Carolina would accept a project yielding a return greater than 8%, and Sanders would reject a return yielding less than 14%.

D. Carolina would accept a project yielding a return greater than 8%, and Sanders would reject a return yielding less than 14%.

58. The following information pertains to Andrew Co. for the year ended December 31:

Sales	US \$720,000
Operating income	120,000
Average capital investment	480,000

Which one of the following formulas generates Andrew's return on investment?

A. $(720,000 \div 480,000) \times (720,000 \div 120,000)$

B. $(480,000 \div 720,000) \times (720,000 \div 120,000)$

C. $(720,000 \div 480,000) \times (120,000 \div 720,000)$

D. $(480,000 \div 720,000) \times (120,000 \div 720,000)$

Answer (C) is correct.

ROI equals capital turnover (sales divided by investment) times the profit margin (net income divided by sales). Andrew's ROI therefore is 25% $[(US \$720,000 \div \$480,000) \times (\$120,000 \div \$720,000)]$.

A.The ROI equals capital turnover (sales divided by investment) times the profit margin (net income divided by sales).

B.The ROI equals capital turnover (sales divided by investment) times the profit margin (net income divided by sales).

D.The ROI equals capital turnover (sales divided by investment) times the profit margin (net income divided by sales).

59.The following information relates to Cinder Co.'s Northeast Division:

Sales	US \$600,000
Variable costs	360,000
Traceable fixed costs	60,000
Average invested capital	120,000
Imputed interest rate	8%

Cinder's residual income was

A.US \$170,400

B.US \$180,000

C.US \$189,600

D.US \$230,400

Answer (A) is correct.

Residual income is the operating income of an investment center minus an imputed interest charge for invested capital. Accordingly, Cinder's residual income is US \$170,400 [(\$600,000 sales – \$360,000 variable costs – \$60,000 traceable fixed costs) operating income – (US \$120,000 average invested capital × 8%) imputed interest].

B.The imputed interest charge of US \$9,600 ($\$120,000 \times 8\%$) must be deducted.

C.The imputed interest charge of US \$9,600 should be subtracted from, not added to, net income.

D.The traceable fixed costs must be deducted.

60. After investing in a new project, a company discovered that its residual income remained unchanged. Which one of the following must be true about the new project?

- A. The net present value of the new project must have been negative.
- B. The return on investment of the new project must have been less than the firm's cost of capital.
- C. The return on investment of the new project must have been equal to the firm's cost of capital.
- D. The net present value of the new project must have been positive.

Answer (C) is correct.

Residual income is the excess of the return on an investment over the firm's cost of capital. If residual income is unchanged, the return on the project must have been the same as the firm's cost of capital.

- A. A negative NPV decreases residual income.
- B. A return less than the cost of capital decreases residual income.
- D. A positive NPV increases residual income.

61. Performance results for four geographic divisions of a manufacturing company are shown below.

Division	Target Return <u>on Investment</u>	Actual Return <u>on Investment</u>	Return <u>on Sales</u>
A	18%	18.1%	8%
B	16	20.0	8

C	14	15.8	6
D	12	11.0	9

The division with the best performance is

- A.Division A.
- B.Division B.
- C.Division C.
- D.Division D.

Answer (B) is correct.

Return on investment, that is, the amount of return generated for the parent firm per dollar of capital invested, is the simplest and generally the soundest measure of divisional performance.

- A.While Division A's actual return on investment most closely matched its target figure, it is still lower than Division B's.
- C.Division C only has the third best actual return on investment.
- D.Division D has the least profitable actual return on investment and the actual return is below the target return.

62.Which of the following performance measures may lead a manager of an investment center to forgo investments that could benefit the company as a whole?

- A.Return on investment.
- B.Residual income.
- C.Profitability index.
- D.Economic value added.

Answer (A) is correct.

A significant drawback of relying on return on investment (ROI) is the temptation to reject capital projects that would decrease the ROI percentage in spite of the fact that they would increase shareholder wealth. Focusing on percentages rather than dollar amounts would lead a manager to forgo investments that could benefit the company as a whole since they could potentially reject projects with positive dollar returns.

B. Residual income is often considered superior to return on investment because it tends to identify projects that are good for the company overall.

C. The profitability index is a good tool for identifying projects that are good for the company overall.

D. The economic value added formula is the formula for residual income adjusted for the opportunity cost of capital. Like residual income, it is preferable to return on investment because it tends to identify projects that are good for the company overall.

63. Each of the following will affect a company's return on investment, except

A. Raising prices as demand remains unchanged.

B. Maintaining the company's cost of capital at current levels.

C. Decreasing expenses.

D. Decreasing investment in assets.

Answer (B) is correct.

Return on investment equals operating income over total assets (or average invested capital). Maintaining the company's cost of capital at current levels will not change the operating income nor the amount of invested capital in the company. Hence, it will not affect the company's return on investment.

A. Return on investment equals operating income over average total assets (or average invested capital). Raising prices as demand remains unchanged will increase the company's revenues and operating income. Hence, it will affect a company's return on investment.

C. Return on investment equals operating income over total assets (or average invested capital). Maintaining the company's cost of capital at current levels will not change the operating income nor the amount of invested capital in the company. Hence, it will not affect the company's return on investment.

D. Return on investment equals operating income over average total assets. Decreasing investment in assets will affect the company's return on investment.

64. Management would like to calculate return on investment (ROI) for the current year. The following information is available:

Operating assets at the end of the year

US \$6,600,000

Operating assets at the beginning of the year	5,400,000
Sales	1,150,000
Operating expenses	550,000

What percentage amount is the ROI?

- A.9%
- B.10%
- C.11%
- D.19%

Answer (B) is correct.

Return on investment can be calculated as follows:

$$\begin{aligned}
 \text{ROI} &= \text{Operating income} \div \text{Average invested capital} \\
 &= (\text{US } \$1,150,000 - \$550,000) \div [(\$5,400,000 + \$6,600,000) \div 2] \\
 &= \text{US } \$600,000 \div \$6,000,000 \\
 &= 10\%
 \end{aligned}$$

A.Dividing operating income by the US \$6,600,000 ending operating assets equals 9%. Return on investment is operating income divided by average invested capital.

C.Dividing operating income by the US \$5,400,000 beginning operating assets equals 11%. Return on investment is operating income divided by average invested capital.

D.Dividing US \$1,150,000 sales by the average operating assets equals 19%. Return on investment is operating income divided by average invested capital.

65.Zig Corp. provides the following information:

Pretax operating profit	US \$ 300,000,000
Tax rate	40%
Capital used to generate profits	

50% debt, 50% equity	US \$1,200,000,000
Cost of equity	15%
Cost of debt	5%

What of the following represents Zig's year-end economic value-added amount?

- A. US \$0
- B. US \$72,000,000
- C. US \$120,000,000
- D. US \$180,000,000

Answer (B) is correct.

Zig's economic value added can be calculated as follows:

WACC=

$$\left[\frac{(\text{US } \$1,200,000,000 \times 50\%)}{\$1,200,000,000} \times 15\% \right] + \left[\frac{(\text{US } \$1,200,000,000 \times 50\%)}{\$1,200,000,000} \times 5\% \times (1 - 40\%) \right]$$

=0.09

=9%

Economic value added (EVA):

After-tax operating income

[US \$300,000,000 × (1 - 40%)] US \$180,000,000

Capital used × cost of capital

(US \$1,200,000,000 × 9%) (108,000,000)

Economic value added US \$ 72,000,000

- A.This amount assumes that the WACC is equal to the cost of equity of 15%.
- C.This amount is the capital charge.
- D.This amount is the net operating profit after taxes.

66.Which of the following formulas should be used to calculate the economic rate of return on common stock?

- A.(Dividends + change in price) divided by beginning price.
- B.(Net income – preferred dividend) divided by common shares outstanding.
- C.Market price per share divided by earnings per share.
- D.Dividends per share divided by market price per share.

Answer (A) is correct.

The economic rate of return on common stock is calculated by (1) adding the dividends received over the period of ownership to the change in the stock price during the period of ownership and (2) dividing this amount by the original price paid for the stock.

- B.This is the formula for the basic earnings per share.
- C.This is the formula for the price-earnings ratio.
- D.This is the formula for the dividend yield.

67.The following data pertain to Canova, Inc., for the year ended December 31:

Net sales	US \$ 600,000
Net income	150,000
Total assets, January 1	2,000,000
Total assets, December 31	3,000,000

What was Canova's rate of return on assets for the year?

- A.5%
- B.6%
- C.20%
- D.24%

Answer (B) is correct.

Return on assets equals net income divided by average total assets, or 6% {US \$150,000 ÷ [(\$2,000,000 + \$3,000,000) ÷ 2]}.

- A.Five percent results from using ending total assets instead of the average total assets.
- C.Twenty percent results from dividing net sales by ending total assets.
- D.Twenty-four percent results from dividing net sales by average total assets.

68.**Fact Pattern:** The information below pertains to Devlin Company.

Statement of Financial Position as of May 31			Income Statement for the year ended May 31		
(in thousands)			(in thousands)		
	Year 2	Year 1		Year 2	Year 1
	_____	_____		_____	_____
Assets			Net sales	US \$480	US \$460
Current assets			Costs and expenses		
Cash	US \$ 45	US \$ 38	Costs of goods sold	330	315
Trading securities	30	20	Selling, general, and		
Accounts receivable (net)	68	48	administrative	52	51
Inventory	90	80	Interest expense	8	9
Prepaid expenses	22	30		_____	_____
	_____	_____	Income before taxes	US \$ 90	US \$ 85
			Income taxes	36	34

Total current assets	US \$255	US \$216		
			Net income	US \$ 54 US \$ 5
Investments, at equity	38	30		
Property, plant, and equipment (net)	375	400		
Intangible assets (net)	80	45		
	_____	_____		
Total assets	US \$748	US \$691		
	_____	_____		
	_____	_____		
Liabilities				
Current liabilities				
Notes payable	US \$ 35	US \$ 18		
Accounts payable	70	42		
Accrued expenses	5	4		
Income taxes payable	15	16		
	_____	_____		
Total current liabilities	US \$125	US \$ 80		
Long-term debt	35	35		
Deferred taxes	3	2		
	_____	_____		
Total liabilities	US \$163	US \$117		
	_____	_____		
	_____	_____		
Equity				
Preferred stock, 6%, \$100 par value,				

cumulative	US \$150	US \$150
Common stock, \$10 par value	225	195
Additional paid-in capital -- common stock	114	100
Retained earnings	96	129
	_____	_____
Total equity	US \$585	US \$574
	_____	_____
Total liabilities and equity	US \$748	US \$691
	_____	_____
	_____	_____

Q.Assuming there are no preferred stock dividends in arrears, Devlin Company's return on common equity for the year ended May 31, Year 2, was

- A.6.3%
- B.7.5%
- C.7.8%
- D.10.5%

Answer (D) is correct.

The return on common equity equals income available to common shareholders divided by average common equity. Net income available to common shareholders is US \$45 [$\$54 - (\$150 \text{ par value of preferred stock} \times 6\%)$]. Average common equity is US \$429.5 $\{[(\$574 - \$150 \text{ preferred stock}) + (\$585 - \$150 \text{ preferred stock})] \div 2\}$. Thus, the return is 10.5% ($\$45 \div \429.5).

- A.Net income available to common shareholders divided by average total assets equals 6.3%.
- B.Net income divided by average total assets equals 7.5%.
- C.Net income divided by beginning total assets equals 7.8%.

69.**Fact Pattern:** The information below pertains to Devlin Company.

Statement of Financial Position as of May 31			Income Statement for the year ended May 31		
(in thousands)			(in thousands)		
	Year 2	Year 1		Year 2	Year 1
	_____	_____		_____	_____
Assets			Net sales	US \$480	US \$460
Current assets			Costs and expenses		
Cash	US \$ 45	US \$ 38	Costs of goods sold	330	315
Trading securities	30	20	Selling, general, and administrative	52	51
Accounts receivable (net)	68	48	Interest expense	8	9
Inventory	90	80		_____	_____
Prepaid expenses	22	30			
	_____	_____	Income before taxes	US \$ 90	US \$ 85
Total current assets	US \$255	US \$216	Income taxes	36	34
Investments, at equity	38	30		_____	_____
Property, plant, and equipment (net)	375	400	Net income	US \$ 54	US \$ 51
Intangible assets (net)	80	45		_____	_____
	_____	_____			
Total assets	US \$748	US \$691			
	_____	_____			
Liabilities					
Current liabilities					
Notes payable	US \$ 35	US \$ 18			
Accounts payable	70	42			
Accrued expenses	5	4			

Income taxes payable	15	16
	<hr/>	<hr/>
Total current liabilities	US \$125	US \$ 80
Long-term debt	35	35
Deferred taxes	3	2
	<hr/>	<hr/>
Total liabilities	US \$163	US \$117
	<hr/>	<hr/>
Equity		
Preferred stock, 6%, \$100 par value,		
cumulative	US \$150	US \$150
Common stock, \$10 par value	225	195
Additional paid-in capital -- common stock	114	100
Retained earnings	96	129
	<hr/>	<hr/>
Total equity	US \$585	US \$574
	<hr/>	<hr/>
Total liabilities and equity	US \$748	US \$691
	<hr/>	<hr/>

Q.Devlin Company's rate of return on assets for the year ended May 31, Year 2, was

A.7.2%

B.7.5%

C.7.8%

D.11.2%

Answer (B) is correct.

The rate of return on assets equals net income divided by average total assets. Accordingly, the rate of return is 7.5% {US \$54 ÷ [(\$748 + \$691) ÷ 2]}.

A.The percentage of 7.2% is based on ending total assets instead of average total assets.

C.Net income divided by beginning total assets equals 7.8%.

D.The return on sales is 11.2%.

70.Fact Pattern: The Statement of Financial Position for King Products Corporation for the fiscal years ended June 30, Year 2, and June 30, Year 1, is presented below. Net sales and cost of goods sold for the year ended June 30, Year 2, were US \$600,000 and US \$440,000, respectively.

King Products Corporation

Statement of Financial Position

(in thousands)

	June 30	
	Year 2	Year 1
Cash	US \$ 60	US \$ 50
Marketable securities (at market)	40	30
Accounts receivable (net)	90	60
Inventories (at lower of cost or market)	120	100
Prepaid items	30	40
	<hr/>	<hr/>
Total current assets	US \$ 340	US \$280
	<hr/>	<hr/>

Land (at cost)	US \$ 200	US \$190
Building (net)	160	180
Equipment (net)	190	200
Patents (net)	70	34
Goodwill (net)	40	26
	<hr/>	<hr/>
Total long-term assets	US \$ 660	US \$630
	<hr/>	<hr/>
Total assets	US \$1,000	US \$910
	<hr/>	<hr/>
Notes payable	US \$ 46	US \$ 24
Accounts payable	94	56
Accrued interest	30	30
	<hr/>	<hr/>
Total current liabilities	US \$ 170	US \$110
	<hr/>	<hr/>
Notes payable, 10% due 12/31/Year 7	US \$ 20	US \$ 20
Bonds payable, 12% due 6/30/Year 10	30	30
	<hr/>	<hr/>
Total long-term debt	US \$ 50	US \$ 50
	<hr/>	<hr/>
Total liabilities	US \$ 220	US \$160
	<hr/>	<hr/>
Preferred stock -- 5% cumulative, \$100 par, nonparticipating, authorized, issued and outstanding, 2,000 shares	US \$ 200	US \$200
Common stock -- \$10 par, 40,000 shares authorized,		

30,000 shares issued and outstanding	300	300
Additional paid-in capital -- common	150	150
Retained earnings	130	100
	<hr/>	<hr/>
Total equity	US \$ 780	US \$750
	<hr/>	<hr/>
Total liabilities & equity	US \$1,000	US \$910
	<hr/>	<hr/>

Q.Assuming that King Products Corporation's net income for the year ended June 30, Year 2, was US \$70,000 and there are no preferred stock dividends in arrears, King Products Corporation's return on common equity was

- A.7.8%
- B.10.6%
- C.10.9%
- D.12.4%

Answer (B) is correct.

The preferred stock dividend requirement is US \$10,000 (\$200,000 par value × 5%), so the income available to common shareholders is US \$60,000 (\$70,000 NI – \$10,000). The return on common equity equals income available to common shareholders divided by the average common equity. Given that preferred equity was US \$200,000 at all relevant times, beginning and ending common equity was US \$550,000 (\$750,000 total – \$200,000) and US \$580,000 (\$780,000 total – \$200,000), an average of US \$565,000 [(\$580,000 + \$550,000) ÷ 2]. The return on common equity was therefore 10.6% (US \$60,000 ÷ \$565,000).

- A.This percentage includes preferred equity in the denominator.
- C.Using beginning-of-the-year equity results in 10.9%.
- D.Not subtracting the preferred dividend requirement from net income results in 12.4%.

71.Fact Pattern:

Lisa, Inc.

Statement of Financial Position

December 31, Year 2

(000s)

Assets	Year 2	Year 1
<hr/>		
Current assets:		
Cash	US \$ 30	US \$ 25
Trading securities	20	15
Accounts receivable (net)	45	30
Inventories (at lower of cost or market)	60	50
Prepaid items	15	20
	<hr/>	
Total current assets	170	140
	<hr/>	
Long-term investments:		
Securities (at cost)	25	20
Property, plant, & equipment:		
Land (at cost)	75	75
Building (net)	80	90
Equipment (net)	95	100
Intangible assets		
Patents (net)	35	17
Goodwill (net)	20	13
	<hr/>	

Total long-term assets	330	315
------------------------	-----	-----

Total assets	US \$500	US \$455
--------------	----------	----------

Liabilities & Shareholders' Equity		
------------------------------------	--	--

Current liabilities:

Notes payable	US \$ 23	US \$ 12
---------------	----------	----------

Accounts payable	47	28
------------------	----	----

Accrued interest	15	15
------------------	----	----

Total current liabilities	85	55
---------------------------	----	----

Long-term debt:

Notes payable 10% due 12/31/Year 9	10	10
------------------------------------	----	----

Bonds payable 12% due 12/31/Year 8	15	15
------------------------------------	----	----

Total long-term debt	25	25
----------------------	----	----

Total liabilities	US \$110	US \$ 80
-------------------	----------	----------

Shareholders' equity:

Preferred -- 5% cumulative, \$100 par, non-participating, 1,000 shares authorized, issued and outstanding	\$100	\$100
---	-------	-------

Common -- \$10 par 20,000 shares authorized, 15,000 issued and		
---	--	--

outstanding shares	150	150
Additional paid-in capital -- common	75	75
Retained earnings	65	50
	<hr/>	<hr/>
Total shareholders' equity	US \$390	US \$375
	<hr/>	<hr/>
Total liabilities & equity	US \$500	US \$455

Q.Assuming that Lisa, Inc.'s net income for Year 2 was US \$35,000, and there were no preferred stock dividends in arrears, Lisa's return on common equity for Year 2 was

- A.7.8%
- B.10.6%
- C.10.9%
- D.12.4%

Answer (B) is correct.

The preferred stock dividend requirement is 5%, or US \$5,000 ($\$100,000 \times 5\%$). Deducting the US \$5,000 of preferred dividends from the US \$35,000 of net income leaves US \$30,000 for the common shareholders. The firm began the year with common equity of US \$275,000 and ended with US \$290,000. Thus, the average common equity during the year was US \$282,500. The return on common equity was 10.6% ($\text{US } \$30,000 \div \$282,500$).

- A.Including the US \$100,000 of preferred stock in the denominator results in 7.8%.
- C.The beginning shareholders' equity of US \$275,000 is based on 10.9%.
- D.Total net income of US \$35,000 is based on 12.4%

72.Spear Corp. had sales of US \$2,000,000, a profit margin of 11%, and assets of US \$2,500,000. Spear decided to reduce its debt ratio to 0.40 from 0.50 by selling new common stock and using the proceeds to repay principal on some outstanding long-term debt. After the refinancing, what is Spear's return on equity (ROE)?

- A.3.5%

B.5.3%

C.14.7%

D.22.9%

Answer (C) is correct.

The debt ratio equals total debt (liabilities) divided by total assets. Therefore, Spear's total liabilities after the repayment of long-term debt are US \$1,000,000 ($\$2,500,000$ total assets \times 0.4 debt ratio). According to the basic accounting equation, assets equal liabilities plus equity. Thus, Spear's equity equals US \$1,500,000 ($\$2,500,000$ assets $-$ \$1,000,000 liabilities). ROE measures the amount of income a company earns per dollar invested by the equity holders. It equals net income divided by average amount of equity (or total equity based on the data provided in this question). Net income for the period is US \$220,000 ($\$2,000,000$ sales \times 11% profit margin). Therefore, the return on equity is 14.7% ($\text{US } \$220,000$ net income \div \$1,500,000 equity).

A.The amount of 3.5% is not the return on equity. ROE measures the amount of income a company earns per dollar invested by the equity holders. It equals net income divided by average amount of equity (or total equity based on the data of this question).

B.The amount of 5.3% is not the return on equity. ROE measures the amount of income a company earns per dollar invested by the equity holders. It equals net income divided by average amount of equity (or total equity based on the data of this question).

D.The amount of 22.9% is not the return on equity. ROE measures the amount of income a company earns per dollar invested by the equity holders. It equals net income divided by average amount of equity (or total equity based on the data of this question).

73.Which of the following ratios should be used to compare the profitability of two electronics companies that differ in size?

A.Quick (acid-test) ratio.

B.Return on assets.

C.Asset turnover.

D.Inventory turnover.

Answer (B) is correct.

Return on assets (ROA) allows an investor to assess how effectively (efficiently) the firm is deploying assets in the pursuit of a return. It equals net income divided by average total assets. Since the return on assets (investment) is stated in percentage terms, it is a very useful measure in comparing the profitability of companies that differ in size.

- A. A quick (acid-test) ratio is a liquidity, not profitability, ratio.
- C. Asset turnover is an activity, not profitability, measure.
- D. Inventory turnover is an activity, not profitability, measure.

74. Which of the following terms refers to a performance measurement that is calculated as an investment center's after-tax operating income minus the product of its total assets multiplied by the company's weighted-average cost of capital (WACC)?

- A. Economic value added.
- B. Return on investment.
- C. Net realizable value.
- D. Profitability index.

Answer (A) is correct.

Economic value added (EVA) is the formula for residual income adjusted for the opportunity cost of capital. The company's WACC is usually used as an opportunity cost of capital. The basic formula for EVA is

After-tax operating income – (Initial investment × Cost of capital).

- B. Return on investment is operating income divided by average invested capital.
- C. Net realizable value is equal to selling price subtracted from additional processing costs and selling costs (any cost to complete and sell the goods).
- D. Profitability index is equal to the present value of future net cash flows or NPV of the project divided by the initial investment.

75. A company's common stock has a market value of US \$45. The company's most recent annual earnings per share is US \$3.60 and the company pays an annual dividend of US \$1.50 per share. What is the company's price-earnings ratio?

- A. 8.82
- B. 12.08
- C. 12.50
- D. 21.43

Answer (C) is correct.

The price-earnings (PE) ratio equals market price per share divided by earnings per share (EPS). The company's market price per share is US \$45 and its EPS is US \$3.60. Thus, its PE ratio is 12.50 (US \$45 ÷ \$3.60).

A. The price-earnings (PE) ratio equals market price per share divided by earnings per share (EPS). The amount of 8.82 is derived by dividing the market price per share (US \$45) by the sum of the EPS (US \$3.60) and dividend per share (US \$1.50). However, dividend per share is not a component of the PE ratio.

B. The price-earnings (PE) ratio equals market price per share divided by earnings per share (EPS). The amount of 12.08 is derived by subtracting the dividend per share (US \$1.50) from the market price per share (US \$45), and then dividing the result (US \$43.50) by the EPS (US \$3.60). However, the market price per share is not reduced by the dividend per share to calculate the PE ratio.

D. The price-earnings (PE) ratio equals market price per share divided by earnings per share (EPS). The amount of 21.43 is derived by dividing the market price per share (US \$45) by the difference of the EPS (US \$3.60) and the dividend per share (US \$1.50). However, EPS is not reduced by the dividend per share to calculate the PE ratio.

76. The four categories of costs associated with product quality costs are

- A. External failure, internal failure, prevention, and carrying.
- B. External failure, internal failure, prevention, and appraisal.
- C. Warranty, product liability, training, and appraisal.
- D. Warranty, product liability, prevention, and appraisal.

Answer (B) is correct.

The four categories of quality costs are (1) prevention, (2) appraisal, (3) internal failure, and (4) external failure. Costs of prevention include attempts to avoid defective output, such as (1) employee training, (2) review of equipment design, (3) preventive maintenance, and (4) evaluation of suppliers. Appraisal includes quality control programs, inspection, and testing. Internal failure costs are incurred when detection of defective products occurs before shipment. They include costs of (1) scrap, (2) rework, (3) tooling changes, and (4) downtime. External failure costs are incurred after the product has been shipped. They include the costs associated with warranties, product liability, and loss of customer goodwill.

- A. Carrying cost is an inventory cost.
- C. All training costs are not quality control related. Also, internal failure costs should be included.
- D. Internal failure costs should be included.

77.The cost of statistical quality control in a product quality cost system is categorized as a(n)

- A.Internal failure cost.
- B.Training cost.
- C.External failure cost.
- D.Appraisal cost.

Answer (D) is correct.

The four categories of quality costs are (1) prevention, (2) appraisal, (3) internal failure, and (4) external failure (lost opportunity). Appraisal costs include quality control programs, inspection, and testing. However, some authorities regard statistical quality and process control as preventive activities. They not only detect faulty work but also allow for adjustment of processes to avoid future defects.

- A.Internal failure costs are incurred after poor quality has been found before shipment. Statistical quality control is designed to detect quality problems.
- B.Statistical quality control is not a training cost.
- C.External failure costs are incurred after the product has been shipped, including the costs associated with (1) warranties, (2) product liability, and (3) loss of customer goodwill.

78.An example of an internal failure cost is

- A.Maintenance.
- B.Inspection.
- C.Rework.
- D.Product recalls.

Answer (C) is correct.

In a quality management system, one of the costs of product nonconformance is internal failure cost, the cost of discovering, after appraisal but before shipment, that a completed product does not meet quality standards. An example is the cost of reworking the product.

- A. A maintenance cost is a prevention cost.
- B. Inspection is an appraisal cost.
- D. Product recalls are external failure costs.

79. Which of the following methods is best suited for evaluating the performance of a firm's capital in any given year?

- A. Internal rate of return.
- B. Net present value.
- C. Economic value-added.
- D. Payback.

Answer (C) is correct.

Economic value-added (EVA) is the formula for residual income adjusted for the opportunity cost of capital. EVA represents a business unit's true economic profit primarily because it is determined by subtracting the cost of equity capital. The EVA method is therefore the best method for evaluating the performance of a firm's capital in any given year.

A. The internal rate of return (IRR) of a project is the discount rate at which the investment's net present value equals zero. The IRR method assumes reinvestment at the IRR, but if the project's funds are not reinvested at the IRR, the ranking calculations obtained may be in error. The IRR method therefore is not the best method for evaluating the performance of a firm's capital in any given year.

B. A project's net present value (NPV) is the difference between the present value of the net cash savings or inflows expected over the life of the project and the required investment. If the difference is positive, the project should be accepted. If the difference is negative, it should be rejected. Although the NPV method is useful in determining whether to accept or reject a project, it is not the best method for evaluating the performance of a firm's capital in any given year.

D. The payback method merely calculates the number of years required for the net cash savings to equal the original investment. It does not provide feedback for evaluating the performance of a firm's capital in any given year.

80. In a quality control program, which of the following is(are) categorized as internal failure costs?

- I. Rework
- II. Responding to customer complaints

III. Statistical quality control procedures

A.I only.

B.II only.

C.III only.

D.I, II, and III.

Answer (A) is correct.

Internal failure costs are those incurred when detection of defective products occurs before shipment. Examples are scrap, rework, tooling changes, and downtime.

B.Responding to customer complaints results in external failure costs.

C.Statistical quality control procedures result in appraisal costs.

D.Responding to customer complaints and statistical quality control procedures results in external failure costs and appraisal costs, respectively.

81.Rework costs should be regarded as a cost of quality in a manufacturing company's quality control program when they are

I.Caused by the customer

II.Caused by internal failure

A.I only.

B.II only.

C.Both I and II.

D.Neither I nor II.

Answer (B) is correct.

Internal failure costs are those incurred when detection of defective products occurs before shipment. Examples are scrap, rework, tooling changes, and downtime. The costs of external failure, e.g., warranty, product liability, and customer ill will, arise when problems occur after shipment.

A.Rework results from an internal failure and therefore cannot be caused by the customer.

C.Rework results from an internal failure and therefore cannot be caused by the customer.

D.Rework costs should be regarded as costs of quality in a manufacturing company's quality control program when caused by internal failure.

82.To evaluate its performance, the Blankie Co. is comparing its costs of quality from one year to the next. The relevant costs are as follows:

	First Year	Second Year
Prevention	US \$45,000	US \$60,000
Appraisal	25,000	35,000
Internal failure	80,000	50,000
External failure	75,000	65,000

Which of the following conclusions can Blankie draw about its quality program?

A.It has been a failure, because conformance costs decreased by US \$40,000 while nonconformance costs increased by US \$25,000.

B.It has been a success, because conformance costs decreased by US \$40,000 and nonconformance costs increased by US \$25,000.

C.It has been a failure, because conformance costs increased by US \$25,000 while nonconformance costs decreased by US \$40,000.

D.It has been a success, because conformance costs increased by US \$25,000 while nonconformance costs decreased by US \$40,000.

Answer (D) is correct.

Conformance costs increased by US \$25,000 [(\$60,000 second year prevention costs – \$45,000 first year prevention costs) + (\$35,000 second year appraisal costs – \$25,000 first year appraisal costs)], and nonconformance costs decreased by US \$40,000 [(\$80,000 first year internal failure costs – \$50,000 second year internal failure costs) + (\$75,000 first year external failure costs – \$65,000 second year external failure costs)]. Because total costs of quality decreased by US \$15,000 (\$40,000 decrease in nonconformance costs – \$25,000 increase in conformance costs), Blankie's quality program was a success.

A.Prevention and appraisal costs are conformance costs, and internal failure and external failure costs are nonconformance costs. Furthermore, total costs of quality decreased by US \$15,000. Thus, the quality program was a success.

B.Prevention and appraisal costs are conformance costs, and internal failure and external failure costs are nonconformance costs.

C.Total costs of quality decreased by US \$15,000, so the quality program was a success.

83.Listed below are selected line items from the cost of quality report for Watson Products for last month.

Category	Amount
Rework	US \$ 725
Equipment maintenance	1,154
Product testing	786
Product repair	695

What is Watson's total prevention and appraisal cost for last month?

- A.US \$786
- B.US \$1,154
- C.US \$1,940
- D.US \$2,665

Answer (C) is correct.

The costs of prevention and appraisal are conformance costs that serve as financial measures of internal performance. Prevention costs are incurred to prevent defective output. These costs include (1) preventive maintenance, (2) employee training, (3) review of equipment design, and (4) evaluation of suppliers. Appraisal costs are incurred to detect nonconforming output. They include such activities as (1) statistical quality control programs, (2) inspection, and (3) testing. The equipment maintenance cost of US \$1,154 is a prevention cost. The product testing cost of US \$786 is an appraisal cost. Their sum is US \$1,940.

- A.The amount of US \$786 is the appraisal cost.
- B.The amount of US \$1,154 is the prevention cost.
- D.The amount of US \$2,665 includes rework, an internal failure cost.

84. Which of the following quality costs are nonconformance costs?

- A. Systems development costs.
- B. Costs of inspecting in-process items.
- C. Environmental costs.
- D. Costs of quality circles.

Answer (C) is correct.

Nonconformance costs include internal and external failure costs. External failure costs include environmental costs, e.g., fines for violations of environmental laws and loss of customer goodwill.

- A. Systems development costs are prevention (conformance) costs.
- B. Costs of inspecting in-process items are appraisal (conformance) costs
- D. Costs of quality circles are prevention (conformance) costs.

85. Fact Pattern: Listed below are costs of quality that a manufacturing company has incurred throughout its operations. The company plans to prepare a report that classifies these costs into the following four categories: preventive costs, appraisal costs, internal failure costs, and external failure costs.

Cost Items	Amount
Design reviews	US \$275,000
Finished goods returned due to failure	55,000
Freight on replacement finished goods	27,000
Labor inspection during manufacturing	75,000
Labor inspection of raw materials	32,000
Manufacturing product-testing labor	63,000
Manufacturing rework labor and overhead	150,000
Materials used in warranty repairs	68,000
Process engineering	180,000
Product-liability claims	145,000
Product-testing equipment	35,000
Repairs to equipment due to breakdowns	22,000
Scheduled equipment maintenance	90,000
Scrap material	125,000
Training of manufacturing workers	156,000

Q. The dollar amount of the costs of quality classified as preventive costs for the manufacturing firm would be

- A. US \$643,000
- B. US \$701,000
- C. US \$736,000

D.US \$768,000

Answer (B) is correct.

Prevention attempts to avoid defective output, e.g., by employee training, review of equipment design, preventive maintenance, and evaluation of suppliers. Accordingly, the preventive costs equal US \$701,000 (\$275,000 design reviews + \$180,000 process engineering + \$90,000 scheduled maintenance + \$156,000 training).

A.The amount of US \$643,000 omits scheduled equipment maintenance and includes labor inspection of raw materials (an appraisal cost).

C.The amount of US \$736,000 includes the cost of product testing equipment (an appraisal cost).

D.The amount of US \$768,000 includes the cost of product testing equipment and labor inspection of raw materials. Both costs are appraisal costs.

86.Product-quality-related costs are part of a total quality control program. A product-quality-related cost incurred in detecting individual products that do not conform to specifications is an example of a(n)

A.Prevention cost.

B.Appraisal cost.

C.External failure cost.

D.Opportunity cost.

Answer (B) is correct.

Quality-related costs can be subdivided into four categories: external failure costs, internal failure costs, prevention costs, and appraisal costs. Appraisal costs embrace such activities as statistical quality control programs, inspection, and testing. Thus, the cost of detecting nonconforming individual products is an appraisal cost.

A.Prevention costs are incurred in an attempt to avoid defective output

C.External failure costs arise when quality problems occur after shipment.

D.Opportunity costs are not specifically associated with product quality. Opportunity cost is the maximum benefit forgone by using a scarce resource for a given purpose; it is the benefit provided by the next best use of that resource.

87.The costs of quality that are incurred in detecting units of product that do not conform to product specifications are referred to as

- A.Prevention costs.
- B.Appraisal costs.
- C.Rework costs.
- D.Failure costs.

Answer (B) is correct.

Appraisal embraces such activities as statistical quality control programs, inspection, and testing. Appraisal costs are those costs (such as test equipment maintenance and destructive testing) incurred to detect which products do not conform to specifications.

- A.Prevention costs are incurred to prevent the production of products that do not conform to specifications.
- C.Rework costs, a type of failure cost, are incurred when a nonconforming product is detected and corrections are made.
- D.Failure costs are incurred in the repair of nonconforming products.

88.Fact Pattern: The management and employees of We Move You, a large household goods moving company, decided to adopt total quality management (TQM) and continuous improvement (CI). They believed that, if their company became nationally known as adhering to TQM and CI, one result would be an increase in the company's profits and market share.

Q.Quality is achieved more economically if We Move You focuses on

- A.Appraisal costs.
- B.Prevention costs.
- C.Internal failure costs.
- D.External failure costs.

Answer (B) is correct.

Prevention attempts to avoid defective output. Prevention costs include preventive maintenance, employee training, review of equipment design, and evaluation of suppliers. Prevention is less costly than detection and correction of defective output.

- A.Prevention is ordinarily less costly than the costs of appraisal.
- C.Prevention is ordinarily less costly than the costs of internal failure.
- D.Prevention is ordinarily less costly than the costs of external failure.

89.Which of the following techniques effectively measures improvements in product quality as a result of internal failure costs?

- A.Inspection of in-process goods.
- B.Recording the number of products returned over time.
- C.Tracking the number of products reworked.
- D.Tracking warranty expenses over time.

Answer (C) is correct.

Internal failure costs occur when defective products are detected before shipment. Examples include scrap, rework, tooling changes, and downtime.

- A.The cost of inspection of in-process goods is an appraisal cost, not an internal failure cost
- B.The number of products returned over time is an external, not internal, failure measure.
- D.Warranty costs are external, not internal, failure costs.

90.A student aircraft mechanic scored 90% on her midterm exam on electronic systems, but her employer wanted a perfect score on every exam, stating, “Nothing less than perfection works in aviation.” Because the mechanic is required to make a test flight in every airplane she repairs, how would the 10% error rate be classified in a cost of quality analysis?

- A.Conformance – prevention.
- B.Conformance – appraisal.
- C.Nonconformance – internal.
- D.Nonconformance – external.

Answer (C) is correct.

Because the mechanic must fly in every aircraft she repairs, the cost of an in-flight failure of an electrical system could be serious. Thus, the 10% error rate is nonconformance (failure of the system) and internal. The mechanic could incur personal consequences from failure of the electrical system.

A.Conformance – prevention costs include cleaning corrosion from wiring, the cost of training, the cost of evaluating the design of the system, obtaining FAA approval for changes, evaluating the quality of the parts installed, etc.

B.Conformance – appraisal costs include testing, inspection, etc.

D.Nonconformance – external costs include the cost of failure to the customer, such as loss of the airplane, and the cost to the firm of a lawsuit resulting from the failure.

91.Using the balanced scorecard approach, an organization evaluates managerial performance based on

A.A single ultimate measure of operating results, such as residual income.

B.Multiple financial and nonfinancial measures.

C.Multiple nonfinancial measures only.

D.Multiple financial measures only.

Answer (B) is correct.

The trend in managerial performance evaluation is the balanced scorecard approach. Multiple measures of performance permit a determination as to whether a manager is achieving certain objectives at the expense of others that may be equally or more important. These measures may be financial or nonfinancial and usually include items with four perspectives: (1) financial; (2) customer service; (3) internal business processes; and (4) learning and growth.

A.The balanced scorecard approach uses multiple measures.

C.The balanced scorecard approach uses financial and nonfinancial measures.

D.The balanced scorecard approach uses financial and nonfinancial measures.

92. On a balanced scorecard, which is more of an internal process measure than an external-based measure?

- A. Cycle time.
- B. Profitability.
- C. Customer satisfaction.
- D. Market share.

Answer (A) is correct.

Cycle time is the manufacturing time to complete an order. Thus, cycle time is strictly related to internal processes. Profitability is a combination of internal and external considerations. Customer satisfaction and market share are related to how customers perceive a product and how competitors react.

- B. Profitability is a measure that includes external considerations.
- C. Customer satisfaction is a measure that includes external considerations.
- D. Market share is a measure that includes external considerations.

93. Which of the following balanced scorecard perspectives examines a company's success in targeted market segments?

- A. Financial.
- B. Customer.
- C. Internal business process.
- D. Learning and growth.

Answer (B) is correct.

Any critical success factor that addresses some aspect of the target market is included in the customer service perspective.

- A. Typical success factors in the financial perspective of a balanced scorecard address matters such as sales, fair value of the firm's stock, profits, and liquidity.
- C. The internal business process perspective would not be the appropriate place to address market share.

D.The learning and growth perspective would not be the appropriate place to address market share.

94.Under the balanced scorecard concept, employee satisfaction and retention are measures used under which of the following perspectives?

A.Customer.

B.Internal business.

C.Learning and growth.

D.Financial.

Answer (C) is correct.

The level of employee satisfaction and retention directly relates to the learning and growth perspective.

A.Employee satisfaction and retention does not relate to the customer perspective

B.Employee satisfaction and retention does not relate to the internal business perspective

D.Employee satisfaction and retention does not relate to the financial perspective

95.Which of the following is one of the four perspectives of a balanced scorecard?

A.Just in time.

B.Innovation.

C.Benchmarking.

D.Activity-based costing.

Answer (B) is correct.

The balanced scorecard is an accounting report that connects the firm's critical success factors determined in a strategic analysis with measures of its performance. The critical success factors (and appropriate measures thereof) are assigned to four perspectives on the business: financial, customer, internal business processes, and learning and growth. Innovation is a facet of the learning and growth perspective.

A.Just in time is a method for managing inventory.

C. Benchmarking is a tool used in quality management. It involves analysis and measurement of key outputs against those of the best organizations.

D. Activity-based costing is a method used to allocate costs to products.

96. On a balanced scorecard, which of the following is not a customer service measure?

A. Market share.

B. Economic value added.

C. Response time.

D. Customer retention.

Answer (B) is correct.

Customer service measures include market share, retention, response time, delivery performance, number of defects, and lead time. Economic value added, or EVA, is a profitability (financial) measure.

A. Market share is a customer service measure.

C. Response time is a customer service measure.

D. Customer retention is a customer service measure.

97. The balanced scorecard provides an action plan for achieving competitive success by focusing management attention on critical success factors. Which one of the following is not one of the perspectives on the business into which critical success factors are commonly grouped in the balanced scorecard?

A. Competitor business strategies.

B. Financial performance.

C. Internal business processes.

D. Employee innovation and learning.

Answer (A) is correct.

A typical balanced scorecard classifies critical success factors and measures into one of four perspectives on the business: financial, customer service, internal business processes, and learning and growth.

B. Financial performance measures are among the tools used in a typical balanced scorecard.

C. A typical balanced scorecard contains critical success factors and measures focused on internal business processes.

D. Employee innovation and learning is one of the perspectives on the business commonly used in a balanced scorecard.

98. Which of the following is a financial measure of success in a balanced scorecard?

A. Market share.

B. Sales growth.

C. Cycle time.

D. Staff morale.

Answer (B) is correct.

Sales growth is a financial measure of success under the critical success factor of sales.

A. Market share is a nonfinancial measure of success.

C. Cycle time is a nonfinancial measure of success.

D. Staff morale is a critical success factor, but it is a nonfinancial measurement.

99. Which of the following types of performance measures integrates financial performance, internal operations, learning and growth, and customer satisfaction?

A. Total productivity.

B. Financial ratio analysis.

C. Balanced scorecard.

D. Benchmarking.

Answer (C) is correct.

A typical balanced scorecard classifies objectives into one of four perspectives: financial, customer service, internal business processes, and learning and growth.

A.Total productivity only measures productivity level.

B.Financial ratio analysis is used to measure company performance.

D.Benchmarking is a tool used in quality management. It involves analysis and measurement of key outputs against those of the best organizations.

100.Which of the following is the primary reason an organization would implement a balanced scorecard measurement system?

A.To drive fact-based organizational change.

B.To improve nonfinancial measures.

C.To clarify strategic objectives.

D.To measure customer impact.

Answer (A) is correct.

A balanced scorecard connects key performance indicators with measures of performance. Performance results then are used as a basis for change within the organization.

B.A balanced scorecard provides both financial and nonfinancial measures.

C.Although a balanced scorecard assists in implementing an organization's strategy, it is primarily a performance measurement tool.

D.A balanced scorecard also provides measures of (1) financial information; (2) internal business processes; and (3) learning, growth, and innovation.

PART-3 UNIT- 3

1.A manager can use power and authority to accomplish objectives. The relationship between these two important concepts is best explained as follows:

- A.Power is the right to do things, while authority is the ability to do things.
- B.Authority is the right to do things, while power is the ability to do things.
- C.Power and authority are both required to accomplish a task.
- D.Power and authority are simply two words that describe the same concept -- how to get things done in organizations.

Answer (B) is correct.

Authority is the officially sanctioned privilege to direct others. A clear hierarchy of authority enhances coordination and accountability. Power is the ability to marshal organizational resources to obtain results. A manager may have both authority and power or have one without the other.

- A.Authority is the right to do things, and power is the ability to do things.
- C.A manager may accomplish a task without having formal authority.
- D.Authority is the right to do things, and power is the ability to do things.

2.A company's decisions are made solely by one person, who is the CEO and major shareholder. Which of the following powers is this person least likely to have?

- A.Coercive power.
- B.Legitimate power.
- C.Referent power.
- D.Reward power.

Answer (C) is correct.

A person who is the head of a company may exert influence through five types of power. Referent power is the capacity of the individual's personality and style to cause others to identify with or like him or her. Thus, it is the one type of power not necessarily held by a CEO and major shareholder. This person has the ability to reward others and apply pressure. (S)he also has the right to expect cooperation.

- A.Coercive power is based on the fear or threat of punishment.
- B.Legitimate power is the leader's right to expect cooperation from others.
- D.Reward power is the individual's ability to influence others through their expectation that good behavior will be rewarded.

3.Which of the following is a true statement about generic influence tactics?

- A.Exchange tactics involve appealing to emotions, values, or ordeals.
- B.Ingratiating tactics attempt to raise the other person's self-esteem prior to a request.
- C.Coalition tactics try to convince others by reliance on a detailed plan, supporting evidence, and reason.
- D.Pressure tactics are based on the formal or informal support of higher management.

Answer (B) is correct.

Management literature describes generic influence tactics that may be upward, lateral, or downward. As noted by researchers, ingratiating tactics attempt to raise the other person's self-esteem prior to a request.

- A.Exchange tactics are based on doing favors for others to receive favors in return.
- C.Coalition tactics seek the aid of others to persuade someone to agree.
- D.Upward appeals to higher authority seek the support of more senior management, whereas pressure tactics involve intimidation, threats, and demands.

4.The director of internal auditing for a large company has established an excellent reputation because of her strong professional credentials and tactful but firm handling of auditor-auditee relationships. With regard to auditees, she must rely upon what sources of power?

- A.Expert and coercive.
- B.Referent and reward.
- C.Referent and expert.

D. Legitimate and coercive.

Answer (C) is correct.

The internal audit director has neither formal (legitimate or position) power over auditees nor the power to coerce (punish) or reward them. Rather, her ability to exert power (influence others) must derive from her specialized ability and knowledge and the force of her personal qualities.

A. She does not have the power to coerce others.

B. She has no power to reward others.

D. She does not have the power to coerce others.

5. Power is synonymous with leadership. Simply put, it is the ability to influence other people. The sources of power are various. For example, the kind of power arising from the strength of the leader's personality is known as

A. Coercive power.

B. Legitimate power.

C. Expert power.

D. Referent power.

Answer (D) is correct.

Power may be classified as reward power (the leader controls resources), coercive power (the leader may punish the subordinate), legitimate power (the leader has the right to lead), referent power (the leader has fame, charisma, etc.), and expert power (the leader has specialized ability or knowledge).

A. Coercive power is based on the fear or threat of punishment.

B. Legitimate power is the leader's right to expect cooperation from others.

C. Expert power is conferred by clearly superior skill or knowledge.

6. The use of power in an organization may be defined as the ability to influence employees to do what they would not ordinarily do. The exercise of this power

A. Affects decisions, behavior, and situations.

- B. Tends to be accepted by employees only when it is based on legitimate power.
- C. Is most likely to be accepted by employees when a manager's source of power is informal.
- D. Requires the authority to manage.

Answer (A) is correct.

The exercise of power affects the decisions made by employees, for example, as the result of advice offered by someone with expert power. It also affects behavior, for example, as the result of a warning from someone with coercive power. Moreover, the exercise of power affects situations, for example, a change in the nature or type of resources used in operations effected by someone with any base of power.

B. Legitimate or position power is closely associated with formal authority. However, human nature is such that employees tend not to obey completely someone who relies solely on legitimate authority. Also, managers may not have the right to direct (exert formal authority over) some people whom they need to influence.

C. The greater the sources of power of a manager, the more likely an employee will be inclined to accept his or her authority. Accordingly, a manager who has both formal and informal sources of power will be more influential than someone with only one source. But, no generalization can be made about likely acceptance of formal versus informal power when power derives from a single source.

D. Authority is the right to manage others. Thus, it differs from power, the ability to accomplish something. A manager may have one without the other.

7. Modern management theory devotes considerable attention to employee empowerment. Done appropriately, employee empowerment

- A. Increases managerial power.
- B. Means lack of control.
- C. Is independent of compensation.
- D. Does not require full employee participation in decision making.

Answer (A) is correct.

Modern management theory emphasizes employee empowerment. The question is not whether employees should be empowered but the circumstances in which it should occur. The paradox is that managers who appropriately surrender power by empowering employees actually gain power. They have an increased ability to achieve desired results.

B. Empowerment is not synonymous with lack of control. Appropriate oversight is necessary.

C. Employees should be fairly compensated for an empowerment program to succeed.

D. Employees should participate fully in making important decisions. But they should be honest, trustworthy, unselfish, skilled, adequately trained, and informed about relevant information.

8. Which of the following best describes the approach to leadership based on emotional intelligence?

A. It attempts to identify traits possessed by leaders.

B. It has produced such a long list of leadership traits that, in effect, the approach identifies nothing.

C. It is based on scholarship, dependability, and social participation.

D. It is based on social skills, judgment, maturity, and emotional control.

Answer (D) is correct.

One traitist approach is based on the emotional intelligence of leaders, that is, their social skills and judgment, maturity, and emotional control. These abilities can be learned, especially when a manager or employee understands that immaturity, erratic behavior, and uncontrolled negative emotions have a bad effect on the workplace.

A. All traitist approaches attempt to identify leadership traits.

B. Other approaches have produced such a long list of leadership traits that, in effect, each approach identifies nothing.

C. The leader with emotional intelligence is self-aware and socially aware and can manage himself or herself and relationships.

9. Leadership situations vary with regard to the degree to which the leader can determine what subordinates will do, how the subordinates will do it, and what the results will be. According to Fiedler's contingency theory, a leader with a relationship-oriented management style will be most effective when exerting

A. Great control.

B. Moderate control.

C. Little control.

D. Great or little control.

Answer (B) is correct.

A relationship-oriented manager is employee-centered. His or her self-esteem is strongly affected by personal interactions with subordinates. Fiedler indicated that such a manager is most effective when not faced with the extremes of high or low control situations. High control follows from strong position power, a structured task, and good leader-member relations. A low-control situation has just the opposite characteristics. In a high-control environment, a concern for personal relations may be unimportant. In a low-control situation, the relationship-oriented leader may be unable to provide the needed task structuring. Thus, the moderate-control situation is best. An example is an assembly-line situation (a structured task) in which leader-member relations are poor.

A.The relationship-oriented leader is least effective in this situation

C.The relationship-oriented leader is least effective in this situation.

D.The relationship-oriented leader is least effective in this situation.

10.Which of the following constitute initiating structure behavior?

1. Defining duties
2. Planning and organizing work
3. Helping with work-related problems

A.1 and 2 only.

B.1 and 3 only.

C.2 and 3 only.

D.1, 2, and 3.

Answer (A) is correct.

According to the Ohio State model, initiating structure behavior is directed towards accomplishing tasks. Structure includes defining duties, establishing procedures, and planning and organizing work. Consideration, on the other hand, is the establishment of a personal relationship between the leader and the subordinate. High consideration by the leader includes warmth toward the employee as a person, psychological support for the employee, and helpfulness with work-related problems.

B.Helping with work-related problems is consideration behavior.

C.Helping with work-related problems is consideration behavior.

D.Helping with work-related problems is consideration behavior.

11. Which of the following is true regarding Fiedler's studies of contingency theory?

- A. The three dimensions of contingency theory are position power, task structure, and relationship structure.
- B. The two types of leaders that emerged from Fiedler's studies include task-oriented style and leader-member style.
- C. Placement of leaders in the organization is not as important as the leaders' leadership skills.
- D. People become leaders not only because of personality attributes, but also because of various situational factors and the interaction between the leaders and the situation.

Answer (D) is correct.

According to Fred E. Fiedler's contingency theory, people become leaders not only because of personality attributes but also because of various situational factors and the interaction between the leaders and the situation. The right person at the right time may rise to a position of leadership if his or her personality and the needs of the situation complement each other.

- A. The three dimensions of contingency theory are position power, task structure, and leader-member relations.
- B. The two types of leaders that emerged from Fiedler's studies are task-oriented style and relationship-oriented style.
- C. Leadership is as much a responsibility of the organization's placement of leaders as it is of the leaders themselves.

12. The leadership grid developed by Robert Blake and Jane Mouton has axes with a scale of 1 to 9. A primary style of 9,9 indicates

- A. Little concern for production or people (impoverished management).
- B. Moderate concern for production and people to maintain status quo (middle-of-the-road management).
- C. Great concern for production and people, trust, teamwork, and commitment (team management).
- D. Primary concern for production, little concern for people (authority-compliance management).

Answer (C) is correct.

A primary style of 9,9 is a maximum on both axes. Thus, this style indicates great concern for production and great concern for people. This leadership style emphasizes output, cost control, and profit in addition to friendship, aiding employees, and addressing employee issues.

- A. Little concern for production or people is equivalent to 1,1 on the leadership grid.
- B. Moderate concern for production and people to maintain status quo is equivalent to a 5,5 on the leadership grid.
- D. Primary concern for production with little concern for people is equivalent to a 9,1 on the leadership grid.

13. Transformational leaders do not

- A. Emphasize empowerment of the worker.
- B. Monitor employees to ensure that they adhere to standards.
- C. Have charisma and provide intellectual stimulation to the workers.
- D. Expect employees to achieve more than the employees thought was possible.

Answer (B) is correct.

Transformational leaders have charisma and provide intellectual stimulation to the workers. Also, they emphasize (1) vision, (2) development of the individual, (3) empowerment of the worker, and (4) the challenging of traditional assumptions. In contrast, a transactional leader monitors employees to ensure that they adhere to standards.

- A. Transformational leaders emphasize empowerment of the worker.
- C. Transformational leaders have charisma and provide intellectual stimulation to the workers.
- D. Challenging employees is a trait of transformational leaders.

14. A manager believes that positive employee attitudes are extremely important. The manager cooperates with employees in solving problems. A likely effect on employee behavior of this leadership style is

- A. Mistrust of the manager.
- B. A lack of extraordinary performance.
- C. High employee turnover.
- D. Increased employee creativity.

Answer (D) is correct.

When a manager works to maintain a positive attitude among employees and cooperates with them in problem solving, employees are likely to be more motivated, confident, and creative. This leadership style also should improve communication and decrease absenteeism.

A. Mistrust of the manager is likely when the leadership style is to impose a set of strict rules, and the manager has a Theory X approach.

B. A lack of extraordinary performance is likely when the leadership style is to impose a set of strict rules, and the manager has a Theory X approach.

C. High employee turnover is likely when the leadership style is to impose a set of strict rules, and the manager has a Theory X approach.

15. Leadership styles differ depending upon the personality type of the individual leader. A risk-averse leader will generally

A. Make decisions more slowly.

B. Require less information than a risk taker.

C. Maintain status differences between others.

D. Work well in participative efforts where joint responsibility is assumed by several people.

Answer (A) is correct.

A risk-averse leader will avoid risky situations, make decisions more slowly, and seek more information than a person who is described as a risk taker.

B. A risk-averse person requires more information than a risk taker

C. The maintenance of status differences is an aspect of authoritativeness, not of risk aversion.

D. Less authoritative individuals work well in participative efforts; this is not related to risk aversion.

16. Paul Hersey and Ken Blanchard developed a situational leadership model with two dimensions: task and relationship behaviors. In this model, a telling leadership style has which dimensions?

A. High task and high relationship.

B. High task and low relationship.

C. Low task and high relationship.

D.Low task and low relationship.

Answer (B) is correct.

A telling leadership style provides specific instructions to employees and closely supervises performance. Thus, the leader tells followers what tasks to accomplish and how to do them. Task-related behavior is high, and relationship-related behavior is low. The telling leadership style is appropriate when followers have low maturity, that is, when they are lacking in competence and confidence and are unable and unwilling to do what is necessary.

A.The dimensions of a selling leadership style are high task and high relationship. Maturity of followers should be low to moderate. They should be willing but unable to do what is necessary.

C.The dimensions of a participating leadership style are low task and high relationship. Maturity of followers should be moderate to high. They should be able but unwilling to do what is necessary.

D.The dimensions of a delegating leadership style are low task and low relationship. Maturity of followers should be high. They should be able and willing to do what is necessary.

17.Paul Hersey and Ken Blanchard developed a situational leadership model with two dimensions: task and relationship behaviors. In this model, a participating leadership style has which dimensions?

A.High task and high relationship.

B.High task and low relationship.

C.Low task and high relationship.

D.Low task and low relationship.

Answer (C) is correct.

A participating leadership style encourages the sharing of ideas and facilitates decision making. The leader must therefore be an effective communicator. The participating leadership style is appropriate when followers have moderate to high maturity, that is, when they are able but not willing to perform the desired actions.

A.The dimensions of a selling leadership style are high task and high relationship. Maturity of followers should be low to moderate. They should be willing but unable to do what is necessary.

B.The dimensions of a telling leadership style are high task and low relationship. Maturity of followers should be low. They lack competence and confidence and are unwilling to do what is necessary.

D.The dimensions of a delegating leadership style are low task and low relationship. Maturity of followers should be high. They should be able and willing to do what is necessary.

18.Paul Hersey and Ken Blanchard developed a situational leadership model with two dimensions: task and relationship behaviors. In this model, the delegating leadership style is appropriate when followers have

- A.Low maturity.
- B.Low to moderate maturity.
- C.Moderate to high maturity.
- D.High maturity.

Answer (D) is correct.

The dimensions of the delegating leadership style are low task and low relationship. Consequently, task- and relationship-related behaviors are low. The leader provides little direction or support because the maturity of followers is high. They are willing and able to do what is necessary.

- A.When followers have low maturity, the telling leadership style is appropriate.
- B.When followers have low to moderate maturity, the selling leadership style is appropriate
- C.When followers have moderate to high maturity, the participating leadership style is appropriate.

19.According to behavior-oriented researchers, which of the following statements is true regarding autocratic leadership styles?

- A.The manager dictates all decisions to the employees, so communication is downward and tasks are clearly defined in autocratic leadership.
- B.Employees in a group are given the authority and responsibility to make their own decisions in democratic leadership.
- C.The leader delegates substantial authority, and employees participate in defining and assigning tasks in laissez-faire leadership.
- D.None of the answers are correct.

Answer (A) is correct.

When a manager uses an autocratic leadership style, (s)he dictates all decisions to the employees, so communication is downward. Also, tasks are clearly defined. This classical approach to leadership does not allow employee input.

B.The leader delegates substantial authority in democratic (participative) leadership. In addition, employees participate in defining and assigning tasks, and communication is actively upward as well as downward.

C.Employees in a group are given the authority and responsibility to make their own decisions in laissez-faire (free-rein) leadership.

D.One of the answer choices is correct.

20.Which source of power is based on the fear or threat of punishment?

A.Referent power.

B.Reward power.

C.Expert power.

D.Coercive power.

Answer (D) is correct.

Coercive power is based on the fear or threat of punishment.

A.Referent power is derived from the leader's charisma or employees' identification with the leader.

B.Reward power is based on a person's ability to grant benefits.

C.Expert power is based on the skills possessed by a person.

21.The audit committee seeks the advice of Dan, a CPA with 15 years of experience, regarding financial reporting. What type of power does Dan apparently have?

A.Referent power.

B.Reward power.

C.Expertise.

D.Coercive power.

Answer (C) is correct.

Expertise is power based upon the perception that an individual has a high level of knowledge or a specialized set of skills (e.g., knowledge of and experience in financial accounting). Dan's power is his advanced knowledge of financial reporting.

A. Referent power is derived from the leader's charisma or employees' identification with the leader.

B. Reward power is based on a person's ability to grant benefits.

D. Coercive power is based on the fear or threat of punishment.

22. The leadership grid developed by Robert Blake and Jane Mouton is a trademarked classification scheme. Which x and y coordinates represent a primary concern for production and little concern for people?

A. 1, 1

B. 1, 9

C. 9, 1

D. 9, 9

Answer (C) is correct.

In the leadership grid, concern for production is on the horizontal (x) axis, and concern for people is on the vertical (y) axis. Each axis has a scale of 1 to 9. Thus, the x-coordinate 9 and y-coordinate 1 represent primary concern for production and little concern for people.

A. X-coordinate 1 and y-coordinate 1 represent little concern for production or people.

B. X-coordinate 1 and y-coordinate 9 represent primary concern for people and little concern for production.

D. X-coordinate 9 and y-coordinate 9 represent great concern for production and people, trust, teamwork, and commitment. These coordinates are believed to represent the best leadership style.

23. According to the leadership grid developed by Blake and Mouton, which of the following reflects primary concern for people and little concern for production?

A. Team management.

B. Middle-of-the-road management.

C. Authority-compliance management.

D. Country club management.

Answer (D) is correct.

Concern for production emphasizes output, cost control, and profit. Concern for people emphasizes friendship, aiding employees in accomplishing tasks, and addressing employee issues (e.g., compensation). Country club management (x-coordinate 1 and y-coordinate 9) has primary concern for people and little concern for production.

A. Team management has great concern for production and people, trust, teamwork, and commitment.

B. Middle-of-the-road management has moderate concern for production and people to maintain the status quo.

C. Authority-compliance management has primary concern for production and little concern for people.

24. According to the leadership grid developed by Blake and Mouton, which management style reflects moderate concern for production and people?

A. Team management.

B. Middle-of-the-road management.

C. Authority-compliance management.

D. Impoverished management.

Answer (B) is correct.

Concern for production emphasizes output, cost control, and profit. Concern for people emphasizes friendship, aiding employees in accomplishing tasks, and addressing employee issues (e.g., compensation). Middle-of-the-road management (x-coordinate 5 and y-coordinate 5) has moderate concern for production and people to maintain status quo.

A. Team management (x-coordinate 9 and y-coordinate 9) has a great concern for production and people, trust, teamwork, and commitment.

C. Authority-compliance management (x-coordinate 9 and y-coordinate 1) has a primary concern for production and little concern for people.

D. Impoverished management has little concern for people or production.

25. Which leadership approach is based on simply maintaining the normal flow of operations?

- A. Transactional leadership.
- B. Transformational leadership.
- C. Supportive leadership.
- D. Participative leadership.

Answer (A) is correct.

A transactional leader emphasizes monitoring of employees so that they adhere to existing rules. Unlike transformational leadership, leaders using the transactional approach are not looking to change the future; they are looking to merely maintain the normal flow of operations.

- B. Transformational leaders inspire the members of the organization to aspire to and achieve more than they thought was possible
- C. Supportive leaders are friendly and concerned about the needs of the employees.
- D. Participative leaders consult with employees and consider their suggestions before making decisions.

26. Management is best defined as

- A. Interaction with employees.
- B. Providing a vision for people in the organization.
- C. Achieving goals efficiently and effectively.
- D. Influencing people to achieve their goals.

Answer (C) is correct.

Management is distinct from leadership. It is defined by Daft (Understanding Management, 10th ed.) as achieving organizational goals effectively and efficiently by planning, organizing, leading, and controlling.

- A. The essence of effective leadership is interaction with people.
- B. Leadership's emphasis is on the people in the organization. It should provide them with a purpose and a vision for change

D. Leadership is defined by Daft as “the ability to influence people toward the attainment of organizational goals.”

27. Management and leadership emphasize different things. Management primarily addresses

- A. Giving people in the organization a purpose.
- B. Stability and reliability of the organization.
- C. The uncertainties in the environment.
- D. Emotional intelligence.

Answer (B) is correct.

Management emphasizes the stability, reliability, and efficiency of the organization. It provides a rational basis for the exercise of leadership.

- A. Leadership’s emphasis is on the people in the organization. It should provide them with a purpose and a vision for change.
- C. Leadership should provide a vision for change given the uncertainties in a rapidly evolving organizational environment.
- D. Emotional intelligence is a trait of leaders. It includes interpersonal skills, judgment, tact, and ability to inspire cooperation.

28. Research indicates that certain traits of leaders correlate with effectiveness. These traits most likely include

- A. Aspiration to lead.
- B. Strong reliance on legitimate power.
- C. Avoidance of such influence tactics as upward appeals.
- D. Innate interpersonal skills that cannot be learned.

Answer (A) is correct.

Research suggests that the following traits may correlate with leader effectiveness:

- 1) Intelligence, knowledge, judgment, and decisiveness
- 2) Drive to excel, persistence in goal attainment, and conscientiousness

- 3) Aspiration to lead, self-confidence, honesty, and optimism tempered by reality
- 4) Energy and stamina
- 5) Education and social mobility

B. Legitimate power is closely associated with formal authority. Employees tend to accept the need to follow the direction of a manager with formal authority. But they tend not to obey completely someone who relies solely on legitimate authority.

C. Upward appeals (to higher authority) seek the support of more senior management. But inspiring trust because of a leader's honesty and expertise results in greater influence than simply exerting formal authority.

D. The emotional intelligence of leaders (e.g., their interpersonal skills, judgment, tact, and ability to inspire cooperation) contributes to leader effectiveness. These abilities can be learned, especially when a person understands that immaturity, erratic behavior, and uncontrolled negative emotions have a bad effect on the workplace.

29. Leaders may use influence tactics to achieve their goals. Influence most likely

- A. Is the potential to influence the behavior of others.
- B. Results from application of learning and skills.
- C. Affects the attitudes of others.
- D. Requires control of rewards.

Answer (C) is correct.

Influence is the effect of actions on not only the behaviors but also the attitudes and values of others.

- A. Power is the potential to influence the behavior of others.
- B. Effective leaders refine their strengths. These are talents that have developed through application of learning and skills. Having certain traits matters less than identifying and using the strengths that result in effective leader performance. Strengths are leader traits.
- D. Control of rewards is a type of position-based hard power, not influence.

30. Which generic influence tactic is most likely to succeed when a leader has high credibility?

- A. Direct requests.

- B. Developing allies.
- C. Exchange of favors.
- D. Rational persuasion.

Answer (D) is correct.

Rational persuasion is the use of facts and reason to convince others. This tactic is most likely to succeed when the leader has high credibility, for example, because (s)he is respected or has expertise.

- A. Direct requests that are clear and explicit may succeed simply because no preferable alternative is available or other possibilities are unclear.
- B. Coalition tactics (development of allies) involve the creation of networks of individuals who will assist in achievement of goals. This approach includes understanding the needs of potential allies, explaining the leader's positions, and consulting about decisions or problems.
- C. Exchange tactics are based on doing favors for others to receive favors in return.

31. Nonleaders are most likely to be able to access power through

- A. Other employees' identification with the individual.
- B. Personal effort.
- C. Threats of punishment.
- D. Control of rewards.

Answer (B) is correct.

Power is not always associated with a specific position or individual. Personal effort, e.g., exceptional initiative, hard work, willingness to do what others do not, and a focus on learning, may be a pathway to power.

- A. Referent power results from the leader's personal traits or employees' identification with the leader. It is a form of personal soft power.
- C. Coercive power is based on the fear or threat of punishment. It is a form of position-based hard power
- D. Control of rewards includes the power to determine pay raises and promotions (formal rewards) or provide praise and attention (informal rewards). It is a form of position-based hard power.

32. An early model of leader behavior was developed at Ohio State University. According to that model, which behavior pattern indicates a passive leader?

- A. High consideration and low structure.
- B. High structure and high consideration.
- C. Low consideration and low structure.
- D. High structure and low consideration.

Answer (C) is correct.

According to the Ohio State model, the initiation of structure (task orientation) and consideration (people orientation) by the leader are two behavior patterns that are consistently found in the study of leadership. This grid model defines the x axis as initiating structure. It measures the accomplishment of tasks (production). The y axis is defined as consideration. It measures the personal relationship (trust, respect, etc.) between the leader and the subordinate. Thus, it assesses how people-centered the leader is. Low consideration and low structure indicate a passive leader.

- A. High consideration and low structure result from an emphasis on satisfying employee needs.
- B. High structure and high consideration reflect a strong emphasis on both task accomplishment and satisfying employee needs.
- D. High structure and low consideration result from a primary focus on task accomplishment.

33. According to the Level 5 leadership model developed by Jim Collins and his associates, a leader at Level 5 is best described as

- A. An effective leader who promotes high standards.
- B. A competent manager who achieves defined objectives.
- C. An interactive leader.
- D. A leader without personal ambition who deflects credit.

Answer (D) is correct.

An executive “builds excellence through dedication and humility.” At Level 5, an executive is without personal ambition, champions organizational values far beyond financial success, deflects credit to others, and encourages development of leadership in all parts of the organization.

- A. At Level 4, an effective leader promotes high standards and commitment to a vision.
- B. At Level 3, competent management of team members and assets achieves defined objectives.
- C. Interactive leadership has similarities to other modern approaches. It is based on consensus and collaboration. Influence therefore results from relationships, not position power. It is not an element of the Level 5 model.

34. According to Robert E. Kelly's model, follower styles are based on which dimensions?

- A. Critical thinking or uncritical thinking and active or passive.
- B. Focus on task and focus on people needs.
- C. Transformational and transactional.
- D. Position power, task structure, and leader-member relations.

Answer (A) is correct.

In Robert E. Kelly's model, follower styles are based on two dimensions. Independent, critical thinkers are aware of the effects of behaviors and decisions of their leaders and others in the organization, including themselves. They can provide constructive feedback and creative solutions. Dependent, uncritical thinkers simply follow instructions without consideration of alternatives and the effects on the organization. An active follower is not constrained by the definition of the job. (S)he (1) is involved in appropriate aspects of the organization, (2) takes ownership, and (3) seeks decisions by superiors about relevant matters. A passive follower (1) requires constant oversight, (2) does not seek responsibility, and (3) makes only the required effort.

- B. The leadership dimensions in the situational model of Hersey and Blanchard are focus on task and focus on people needs.
- C. A transformational leader is a change agent who combines task orientation and people orientation. This kind of leader can inspire employees to achieve more than they thought possible. A transactional leader is an effective manager who is task- and people-oriented. (S)he also is committed to (1) efficient operations and increased productivity and (2) the organization's norms and values. Unlike transformational leaders, transactional leaders seek not to change the future but to maintain the normal flow of operations.
- D. Position power, task structure, and leader-member relations are the factors in Fiedler's leadership model.

35. Which of the following most likely is an element of authentic leadership?

- A. Service to others and the organization's higher purposes.

B. Self-discipline and willingness to admit mistakes.

C. Job-centered leadership.

D. Team management

Answer (B) is correct.

Authentic leadership is practiced by those who (1) are genuinely self-aware, (2) behave in accordance with (and actively support) the highest ethical precepts, and (3) inspire trust and commitment in others because of their authenticity and candor. They also (1) encourage collaboration and a diversity of views and (2) help others become leaders. An element of authentic leadership is self-discipline that avoids excessive or inappropriate risks to the organization or others, together with a willingness to admit mistakes.

A. Servant leadership involves service to (1) others (e.g., helping employees meet their needs and achieve their objectives), (2) the broader society, and (3) the higher purposes of the organization

C. Research at the University of Michigan found that job-centered leaders were less effective. They stressed cost-control efficiency and adherence to schedules, not goal attainment and employee needs.

D. Team management is a leadership style from the leadership grid developed by Blake and McCanse. Team management has great concern for production and people, trust, teamwork, and commitment. Blake and his associates assert that this management style is best. It produces the best operating results, health outcomes, and conflict resolutions.

36. According to the leadership styles model developed at Ohio State University, a primary emphasis on task accomplishment results in

A. High consideration and low structure.

B. High structure and high consideration.

C. Low consideration and low structure.

D. High structure and low consideration.

Answer (D) is correct.

According to the Ohio State model, the initiation of structure (task orientation) and consideration (people orientation) by the leader are two behavior patterns that are consistently found in the study of leadership. This grid model defines the x axis as initiating structure. It measures the accomplishment of tasks (production). The y axis is defined as consideration. It measures the personal relationship (trust, respect, etc.) between the leader and the subordinate. Thus, it assesses how people-centered the leader is. High structure and low consideration result from a primary focus on task accomplishment.

- A.High consideration and low structure result from an emphasis on satisfying employee needs.
- B.High structure and high consideration reflect a strong emphasis on both task accomplishment and satisfying employee needs.
- C.Low consideration and low structure indicate a passive leader.

37.According to the leadership grid developed by Robert Blake and Anne McCauley, which style produces the best operating results?

- A.Country club management.
- B.Authority-compliance management.
- C.Middle-of-the-road management.
- D.Team management.

Answer (D) is correct.

Team management has great concern for production and people, trust, teamwork, and commitment. Blake and his associates assert that this management style is best. It produces the best operating results, health outcomes, and conflict resolutions.

- A.Country club management gives primary attention to human relationships and a friendly work atmosphere.
- B.Authority-compliance management has a primary concern for operating efficiency.
- C.Middle-of-the-road management balances adequate performance and satisfactory morale.

38.According to Fred E. Fiedler's contingency theory of leadership,

- A.The task-motivated style is most effective when a situation is very favorable or unfavorable.
- B.The dimensions of leadership style are initiating structure and consideration.
- C.The relationship-motivated style is most effective when a situation is very unfavorable.
- D.The assumption is that an individual's leadership style is adaptable to the situation.

Answer (A) is correct.

The task-motivated style is most effective when the situation is very favorable or very unfavorable. The situation is very favorable when the leader's position of power is high, tasks are well defined, and

leader-member relations are good. The situation is very unfavorable when the reverse is true. In a favorable situation, a leader has little need to address relationship issues and should therefore concentrate on the work. In an unfavorable situation, the leader must emphasize close supervision.

B. Initiating structure and consideration are the dimensions in the Ohio State model.

C. The relationship-motivated style is most effective when a situation is moderately favorable

D. Fiedler assumed that a leadership style is difficult to alter. Thus, the style should be matched with the situation in which it is most likely to be effective

39. According to the situational leadership theory developed by Hersey and Blanchard, followers' readiness to be responsible for their behavior depends on

A. Position power of the leader and task structure.

B. Willingness and ability.

C. Ability and leader-member relations.

D. Availability of a substitute for task-oriented leadership.

Answer (B) is correct.

According to the situational leadership theory developed by Hersey and Blanchard, the appropriate style depends on the followers' maturity. Willingness (confidence, commitment, and motivation) and ability (knowledge, experience, and skill) are the components of maturity. These qualities determine followers' readiness to be responsible for directing their behavior.

A. In Fiedler's contingency theory, the favorability of a leadership style depends on the leader's position power, task structure, and leader-member relations.

C. Leader-member relations is a dimension of Fiedler's contingency model of leadership.

D. Hersey and Blanchard's situational model is based on followers' maturity. Another contingency theory proposes that situational variables may be in the form of organizational, task, or group circumstances that substitute for or neutralize task- or people-oriented leadership.

40. A leader inspires followers to achieve more than they thought possible. Followers also tend to have a primary belief in that person. Such a leader most likely is

A. Transformational.

- B. Transactional.
- C. Charismatic.
- D. Interactive.

Answer (C) is correct.

A charismatic leader has many qualities of a transformational leader. The key difference is that followers tend to have a primary belief in the person of the leader. Moreover, some charismatic leaders lack humility, which is an absence of ego, a tendency to self-effacement, and an intense determination to do what is best in the long run for the organization and its people. Thus, charismatic leaders who lack humility and are egocentric, self-serving, and exploitive may have negative effects on the group.

A. A transformational leader is a change agent who combines task orientation and people orientation. This kind of leader can inspire employees to achieve more than they thought possible. (S)he inspires followers not only to believe in the leader but also to believe in their own ability and creativity.

B. A transactional leader is an effective manager who is task- and people-oriented. (S)he also is committed to (1) efficient operations and increased productivity and (2) the organization's norms and values. Unlike transformational leaders, transactional leaders seek not to change the future but to maintain the normal flow of operations.

D. Interactive leadership has similarities to other modern approaches. It is based on consensus and collaboration. Influence therefore results from relationships, not position power.

41. According to Robert E. Kelly's model of follower styles, an independent, critical thinker who is passive is a(n)

- A. Alienated follower.
- B. Conformist.
- C. Pragmatic survivor.
- D. Effective follower.

Answer (A) is correct.

An alienated follower is an independent, critical thinker who is passive. The individual has the ability to be effective but avoids participation in the organization because of past disappointments.

B. A conformist is an organizational participant who avoids conflict and is subject to groupthink. One reason for such conformity may be an authoritarian culture that imposes rigid rules.

C. A pragmatic survivor adopts the follower style that avoids risk and maximizes personal benefit in a specific situation, e.g., when the organization is in crisis.

D. An effective follower is at the favorable end of each dimension. (S)he is (1) self-managed, (2) self-aware, and (3) committed to organizational success. (S)he also accepts appropriate risk and conflict in pursuit of higher goals.

42. A situational variable that substitutes for task-oriented and people-oriented leadership is

A. Physical absence of a leader.

B. Lack of position power of a leader.

C. Group professionalism.

D. Formal rules and procedures.

Answer (C) is correct.

A substitute eliminates the need for instructions from a leader. Examples of substitution for task-oriented leadership are (1) a group of professionally trained and experienced employees, (2) formal rules and procedures, and (3) highly structured tasks. The training and experience, detailed rules, or structures provide the necessary definition of tasks and responsibilities. But the group still may need people-oriented leadership provided by group professionalism but not by rules or structures.

A. An example of neutralization of (not substitution for) both kinds of leadership is the physical absence of a leader. These circumstances diminish the ability to exercise authority.

B. An example of neutralization of (not substitution for) both kinds of leadership is the lack of position power of a leader. These circumstances diminish the ability to exercise authority.

D. Formal rules and procedures do not substitute for people-oriented leadership.

43. The generic influence tactic of developing allies most likely includes

A. Use of facts to convince others.

B. Seeking the support of a more senior manager.

C. Making positive impressions on coworkers.

D. Consulting about problems.

Answer (D) is correct.

Coalition tactics (development of allies) involve the creation of networks of individuals who will assist in achievement of goals. This approach includes understanding the needs of potential allies, explaining the leader's positions, and consulting about decisions or problems.

A. Rational persuasion is the use of facts and reason to convince others. This tactic is most likely to succeed when the leader has high credibility, for example, because (s)he is respected or has expertise.

B. Upward appeals (to higher authority) seek the support of more senior management. But inspiring trust because of a leader's honesty and expertise results in greater influence than simply exerting formal authority.

C. Ingratiation tactics include generating goodwill and positive impressions. Being fair, considerate, respectful, trusting, and generous with praise helps a leader to be liked by those (s)he wants to influence.

44. Which type of power is associated with formal authority?

A. Referent.

B. Legitimate.

C. Coercive.

D. Network of relationships.

Answer (B) is correct.

Legitimate power is closely associated with formal authority. Employees tend to accept the need to follow the direction of a manager with formal authority. But they tend not to obey completely someone who relies solely on legitimate authority. Legitimate power is a type of position-based hard power.

A. Referent power results from the leader's personal traits or employees' identification with the leader.

C. Coercive power is based on the fear or threat of punishment.

D. A network of relationships provides access to information about events in the organization or industry that is not widely known. It is a form of power not associated with a specific position or individual.

45. Which form of power not associated with a specific person or individual may be accessed by a nonleader?

- A. Control of information.
- B. Expert.
- C. Soft.
- D. Legitimate.

Answer (A) is correct.

Leaders and nonleaders may access certain power sources. For example, access to, and control over, information confers power. Access and control depend in part on a person's status in the managerial hierarchy. This form of power is not based on a particular person or position but on how the individual is involved in the overall work of the entity.

- B. Expert power is conferred by clearly superior skill or knowledge. It need not be held by a leader. However, it is a form of personal soft power.
- C. Soft power is by its nature personal.
- D. Legitimate power is closely associated with formal authority. It is a form of position-based hard power.

46. The interactive leadership style is a modern approach. It is

- A. Based on consensus and collaboration.
- B. Most commonly adopted by male leaders.
- C. An approach favored by transactional leaders.
- D. Synonymous with mentoring.

Answer (A) is correct.

Interactive leadership is based on consensus and collaboration. Influence therefore results from relationships, not position power.

B. The interactive style is most commonly adopted by female leaders. But men also may be effective interactive leaders. Research indicates that female leaders perform better than males regarding motivation, relationship building, and developing others.

C. A transactional leader is an effective manager who is task- and people-oriented. (S)he also is committed to (1) efficient operations and increased productivity and (2) the organization's norms and values. Unlike transformational leaders, transactional leaders seek not to change the future but to maintain the normal flow of operations.

D.Mentoring is systematic development of leadership by providing career counseling and social nurturing. It requires intensive tutoring, coaching, and guidance.

47.Fred E. Fiedler’s contingency theory of leadership depends on which situational factors?

- A.Aspiration to lead, drive to excel, and judgment.
- B.Legitimate power, initiation of structure, and intelligence.
- C.Position power, task structure, and leader-member relations.
- D.Emotional intelligence, expert power, and rational persuasion.

Answer (C) is correct.

Whether a leadership style is favorable for a leader depends on three situational factors. Position power is based on the formal authority structure. It is the degree to which the position held enables a leader to evaluate, reward, punish, or promote group members. It is independent of other sources of power, such as personality or expertise. Task structure is how clearly and carefully members’ responsibilities for various tasks are defined. Quality of performance is more easily controlled when tasks are clearly defined. Leader-member relations reflect the extent to which group members like, trust, and are willing to follow a leader.

A.Aspiration to lead, drive to excel, and judgment are traits that may correlate with leader effectiveness, not situational factors.

B.Legitimate power (formal authority) is a type of position-based hard power. Initiation of structure is a measure of production in the Ohio State model. Intelligence is a trait that may correlate with leader effectiveness, not a situational factor.

D.The emotional intelligence of leaders (e.g., their interpersonal skills, judgment, tact, and ability to inspire cooperation) contributes to leader effectiveness. These abilities can be learned, especially when a person understands that immaturity, erratic behavior, and uncontrolled negative emotions have a bad effect on the workplace. Emotional intelligence is a leader trait, not a situational factor. Expert power is a form of soft power, not position-based hard power. Rational persuasion is a generic influence tactic.

48.According to Robert E. Kelly’s model, which individual may adopt any of the follower styles?

- A.Passive.
- B.Pragmatic.
- C.Effective.
- D.Servant.

Answer (B) is correct.

A pragmatic survivor adopts the follower style that avoids risk and maximizes personal benefit in a specific situation, e.g., when an organization is in crisis. Thus, a pragmatic survivor may be (1) active or passive and (2) an independent, critical thinker or a dependent, uncritical thinker.

A. A passive follower may be an employee who is discouraged from engaging in positive behaviors by a micromanaging superior. A passive follower is neither an active participant nor an independent, critical thinker.

C. An effective follower is at the favorable end of each dimension. (S)he is (1) self-managed, (2) self-aware, and (3) committed to organizational success. (S)he also accepts appropriate risk and conflict in pursuit of higher goals.

D. Servant leadership (not followership) involves service to (1) others (e.g., helping employees meet their needs and achieve their objectives), (2) the broader society, and (3) the higher purposes of the organization.

49. A defining trait of an authentic leader is

A. The ability to act with compassion when making hard decisions.

B. Achieving consensus using position power.

C. Promoting high performance standards.

D. Accessing power through personal effort.

Answer (A) is correct.

The following are elements of authentic leadership:

1. Passionate devotion by the leader to a purpose that inspires followers
2. Values grounded in a personal belief system consistently followed by the leader that help to create trust
3. The ability to make difficult decisions without abandoning compassion
4. Having positive long-term relationships, including choosing good associates and facilitating the personal and professional growth of others
5. Self-discipline that avoids excessive or inappropriate risks to the organization or others, together with a willingness to admit mistakes

B. Exercise of position power is a normal management function of many types of leader

C. In the Level 5 leadership hierarchy, an effective leader (Level 4) promotes high standards and commitment to a vision. An authentic leader is similar to a Level 5 leader.

D. Nonleaders may be capable of accessing power through personal effort.

50. According to Hersey and Blanchard's situational theory, which leadership style is used when followers are closely supervised?

A. Effective follower.

B. Telling.

C. Transactional.

D. Selling.

Answer (B) is correct.

The telling style has a higher focus on task and a low focus on people needs. This style provides specific instructions and closely supervises performance. Followers are low in confidence, ability, and readiness.

A. In Robert E. Kelly's model of follower styles, an effective follower is at the favorable end of each dimension. (S)he is (1) self-managed, (2) self-aware, and (3) committed to organizational success. (S)he also accepts appropriate risk and conflict in pursuit of higher goals

C. A transactional leader is an effective manager who is task- and people-oriented. (S)he also is committed to (1) efficient operations and increased productivity and (2) the organization's norms and values. Unlike transformational leaders, transactional leaders seek not to change the future but to maintain the normal flow of operations.

D. The selling style has a high focus on task and people needs. A selling leadership style explains decisions and provides opportunity for clarification. Followers are confident and moderately ready but lack ability.

51. Hersey and Blanchard's situational theory determines the appropriate leadership style based on followers' maturity. Which style develops followers' confidence and ability?

A. Delegative.

B. Transformational.

C.Participating.

D.Job centered.

Answer (C) is correct.

The participating style has a low focus on task and a high focus on people needs. This style encourages sharing of ideas and develops followers' confidence and ability. Followers have high readiness but low confidence.

A.The delegative style transfers responsibility for decisions and implementation. Followers have very high readiness, including ability and confidence.

B.A transformational leader is a change agent who combines task orientation and people orientation. This kind of leader can inspire employees to achieve more than they thought possible.

D.According to research at the University of Michigan, job-centered leaders were less effective. They stressed cost-control, efficiency, and adherence to schedules, not goal attainment and employee needs.

52.A manager implementing the directive leader approach should

A.Closely supervise each employee.

B.Display confidence in each employee's ability.

C.Work with the employee when developing goals.

D.Clearly signal that the employee is expected to be successful.

Answer (A) is correct.

The situational approach to leadership (called path-goal theory) allows a manager to choose one of four approaches for implementing his or her leadership style. Using the directive leader approach, a manager provides close guidance to the employee through the use of specific rules, policies, and procedures.

B.This action would be taken when implementing the achievement-oriented leader approach.

C.This action would be taken when implementing the achievement-oriented leader approach.

D.This action would be taken when implementing the achievement-oriented leader approach.

53.Which of the following is a benefit of implementing the achievement-oriented leader approach rather than the directive leader approach?

- A. Employee development is enhanced.
- B. The structured environment allows employees to better achieve the organization's goals.
- C. Closer supervision is provided for employees who perform better in a structured work atmosphere.
- D. Employees have more opportunities to develop creativity and meet challenges.

Answer (D) is correct.

The benefits of the achievement-oriented leader approach include (1) greater employee confidence and commitment, (2) more employee decision making, (3) increased employee creativity, (4) more challenging objectives, and (5) reduced supervision for employees who work best independently.

- A. Employee development also is enhanced under the directive leader approach.
- B. A structured environment results from the directive leader approach. It is not a characteristic of the achievement-oriented leader approach.
- C. Close supervision results from the directive leader approach. It is not a characteristic of the achievement-oriented leader approach.

54. Which of the following leadership styles is least likely to consider input from employees in the decision process?

- A. Laissez faire.
- B. Autocratic.
- C. Participative.
- D. Consultative.

Answer (B) is correct.

The autocratic manager dictates all decisions to employees. Employees are not allowed to give input. Autocratic leaders rely on threats and punishment and do not trust workers. Autocratic leadership sometimes can be the most effective form, such as when time for making decisions is limited or workers do not respond to any other leadership style.

- A. The employees make their own decisions.
- C. A participative (or democratic) leader must incorporate employees' views in the decision process; employees are trusted.

D.A consultative leader takes the employees' views into account but still makes the decisions himself or herself.

55.A manager that manages “by the book” exhibits which form of leadership style?

- A.Autocratic.
- B.Bureaucratic.
- C.Democratic.
- D.Free-rein.

Answer (B) is correct.

A bureaucratic manager must do everything according to procedure and policy. If no policy covers a situation, the manager refers to the next management level above.

- A.An autocratic manager dictates all decisions to the employees. It is the classical approach to leadership. Employees are not allowed to give input.
- C.A democratic style of management allows employees to have input in the decision making process, and the manager must include subordinates' views in the decision.
- D.A manager that practices the free-rein style of leadership allows employees to make their own decisions.

56.Which of the following factors is least likely to affect a manager's optimal span of control?

- A.Frequency of supervisor-subordinate contact.
- B.The manager's willingness to delegate authority.
- C.The manager's training and communication skills.
- D.Number of people in the organization.

Answer (D) is correct.

The optimal span of control is the number of subordinates a manager can effectively supervise. It is a function of many situational factors. However, the total number of people in an organization has no bearing on the optimal span of control of a particular manager.

A. Managers who can contact subordinates frequently are able to control more people than those who have relatively infrequent contact with subordinates.

B. Managers who delegate authority have more time to control the subordinates who report to them. These individuals can therefore supervise more people than managers who prefer not to delegate authority.

C. Managers who have received effective training and are skillful communicators are equipped to control more individuals than managers who are untrained or have deficient communication skills.

57. As an organization increases the number of employees, its structure becomes more complex. Rules become more formalized, and more supervisors are hired to direct the increased numbers of subordinates. What is the nature of the size-structure relationship?

A. The size-structure relationship is linear.

B. The structure becomes fixed once an organization attains a level of about 200 employees.

C. The size-structure relationship is concave.

D. None of the answers are correct.

Answer (D) is correct.

As an organization increases in size, its structure tends to become more formal and mechanistic. More policies and procedures are necessary to coordinate the increased number of employees, and more managers must be hired. However, the relationship between size and changes in structure is linear only within a certain range. For example, adding 100 employees to a company with 100 employees is likely to cause significant structural change, but adding the same number to a workforce of 10,000 is likely to have little impact. By the time a company reaches a certain size (1,500 to 2,000 or more), it usually has most of the qualities of a mechanistic structure.

A. The size-structure relationship is likely to be linear but only within a narrow range.

B. The size-structure relationship is likely to be linear but only within a narrow range.

C. The size-structure relationship is likely to be linear but only within a narrow range.

58. Which of the following is a disadvantage of a flat organizational structure?

A. Employees are not encouraged to be creative.

B. The input of fresh ideas from outside the organization is limited because employee turnover is low.

C. Managers spend too much time training individuals and not enough time supervising.

D. Employees may not be performing work tasks properly.

Answer (D) is correct.

A flat organizational structure concentrates decision-making authority at one level. Tasks and performance objectives may be unclear to employees because of a lack of supervision.

A. The lack of supervision increases employee flexibility.

B. The number of management levels limits the opportunity for advancement, which may cause high employee turnover.

C. The lack of supervision decreases employee training.

59. An organization that combines strict adherence to the unity of command with high division of labor may cause problems for customers trying to obtain information. Of the following, which is the most probable type of internal environment this structure creates?

A. Networked and formal.

B. Compartmentalized and informal.

C. Networked and informal.

D. Compartmentalized and formal.

Answer (D) is correct.

A high division of labor results in specialization. Unity of command clarifies authority and responsibility relationships. An organizational structure with a high division of labor and a strict unity of command is a classic bureaucracy. Thus, it is compartmentalized and formal.

A. The structure is not networked.

B. The structure is not informal.

C. The structure is not networked or informal.

60. A large organization uses assembly line techniques to manufacture a single product. Its choice of relatively mechanistic organizational design was most likely based on its

A. Need for rapid response to environmental change.

- B.Primary concern for operational efficiency.
- C.Low fixed technology requirement.
- D.Project management emphasis.

Answer (B) is correct.

Mechanistic organizations have vertical structures with duties and authority clearly defined by position in the hierarchy, a stringent set of formal controls, and a centralized staff. Such organizations tend to emphasize efficiency and operate in a stable environment with well-established technology. Large firms in basic industries (autos, utilities) often adopt this structure.

- A.Rapid response to environmental change is characteristic of an organic organization. This arrangement often works best when the fixed asset base is relatively small because the organization must respond rapidly to frequent environmental change.
- C.A low fixed technology requirement is characteristic of an organic organization. This arrangement often works best when the fixed asset base is relatively small because the organization must respond rapidly to frequent environmental change.
- D.A project management emphasis is characteristic of a matrix form of organization.

61.The organizational structure most appropriate for product development activity is

- A.Organic.
- B.Geographic.
- C.Centralized.
- D.Mechanistic.

Answer (A) is correct.

Organic organizations tend to be flexible and highly adaptive to change. They allow for participative lateral communication and informal interaction among departments and personnel. These characteristics are favorable for product development, a process requiring creativity, cooperation, and a rapid response to change. Organic organizations are the opposite of mechanistic organizations.

- B.Geographic location structure provides departmental resources closest to customers or sources of supply.
- C.Centralization is the relative retention of decision-making authority by top management.
- D.Mechanistic organizations tend to be bureaucratically rigid.

62. Routine tasks, which have few exceptions and problems that are easy to analyze, are conducive to

- A. Formalized structure, in which procedures manuals and job descriptions are common.
- B. Decentralized decision making, in which decisions are pushed downward in the organization.
- C. Organic structures that emphasize adaptability and flexibility to changing circumstances.
- D. High degrees of job satisfaction on the part of the employees performing them.

Answer (A) is correct.

Technology has been viewed in terms of two dimensions: task variability and problem analyzability, or the exceptions encountered in work and the search procedures for responding to the exceptions, respectively. Routine tasks have few exceptions, and the search for solutions is well defined. Because routine tasks change little over time, they are well suited to a mechanistic structure. One characteristic of such a structure is high formalization.

- B. Decentralized decision making is not suited to routine tasks but to organic structures.
- C. Organic structures are best when problems are poorly defined.
- D. Job satisfaction is often low in routine and repetitive tasks.

63. Which of the following is generally true regarding a manager's span of control?

- A. Narrow spans of control are typically found in flat organizations, those with few hierarchical levels.
- B. An organization with narrow spans of control needs more managers than those with wide spans.
- C. Wider spans of control mean higher administrative expense and less self-management.
- D. Wider spans of control help ensure good internal controls and policy compliance throughout an organization.

Answer (B) is correct.

Span of control (span of management or span of authority) is an upper limit to the number of people who can be effectively and efficiently supervised by one person. Narrow spans of control mean that the ratio of those supervised (subordinates) to those doing the supervision (managers) is lower. Hence, more managers are required.

- A. Narrow spans of control mean a tall organization with many more levels.

C. Narrow spans of control result in higher administrative expense (coordination) and less self-management.

D. Wider spans of control give subordinates more discretion.

64. The difference between a tall organization structure and a flat organization structure is that, in the former,

A. The communication process takes longer and is of poorer quality.

B. Maintenance of the organization is less costly.

C. The morale of lower-level employees is generally higher.

D. A higher degree of coordination and cooperation is created.

Answer (A) is correct.

Flat organizational structures have relatively few levels from top to bottom. Tall organizational structures have many levels between top and bottom. Flat structures have the advantages of fast information flow from top to bottom of the organization and increased employee satisfaction. Tall structures are faster and more effective at problem resolution because of the increased frequency of interaction between superior and subordinate and the greater order imposed by the hierarchy. Studies do not indicate great advantages for either flat or tall structures.

B. Lower costs of maintenance of the organization is an advantage of a flat structure

C. Higher morale of lower-level employees is an advantage of a flat structure.

D. A higher degree of coordination and cooperation is an advantage of a flat structure.

65. A flat organization structure is one with relatively few levels of hierarchy and is characterized by wide spans of management control. A tall organization has many levels of hierarchy and narrow spans of control. Which of the following situations is consistent with a flat organization structure?

A. Tasks require little direction and control of subordinates.

B. Work areas are geographically dispersed.

C. Tasks are highly complex and varied.

D. Subordinates perform distinctly different tasks.

Answer (A) is correct.

Flat structures have the advantages of fast information flow from the top to the bottom of the organization and increased employee satisfaction. Tall structures are faster and more effective at problem resolution because of the increased frequency of interaction between superior and subordinate and the greater order imposed by the hierarchy. For a flat structure to be successful, employees must be able to work without supervision much of the time because a manager with many employees has little time for each one.

B. Geographically dispersed work areas are very difficult for a manager with many subordinates to control.

C. Tasks that are highly complex and varied are more appropriate for a narrow span of control.

D. A narrow span of control (a tall structure) is more appropriate when subordinates perform distinctly different tasks.

66. Departmentation is the grouping of organizational subsystems. The greatest advantage of functional departmentation is that it

A. Provides the benefits of specialization.

B. Facilitates communication between primary functions.

C. Helps to focus on achievement of organizational goals.

D. Is appropriate for geographically dispersed companies.

Answer (A) is correct.

Departmentation by function is the most widely used method and is found in almost every enterprise at some level. The most common departments are selling, production, and finance (though other terms may be used). These often extend upward in the organizational chart to the level below the chief executive. If persons within a department have similar knowledge, skills, and interests, they can specialize in the solution of particular problems. Thus, problem solving becomes more efficient.

B. Departmentation by function facilitates communication and coordination within rather than between departments.

C. The focus may tend to be on departmental, not organizational, goals.

D. Territorial departmentation may be preferable for these companies.

67. Departmentation is a common form of business integration. Grouping together all related jobs, activities, and processes for a given business objective into a major organizational subunit is an example of

- A.Product-service departmentation.
- B.Functional departmentation.
- C.Geographic location departmentation.
- D.Customer classification departmentation.

Answer (A) is correct.

Departmentation by product or service is growing in importance for multiline, large-scale enterprises and is an outgrowth of functional departmentation. The result is that product-service subunits may be treated as separate businesses with a high degree of autonomy. Managers must therefore have a broad perspective, not a merely functional orientation.

- B.Functional departmentation categorizes jobs according to the activity performed.
- C.Geographic location departmentation categorizes based upon the area in which a part of the business is located.
- D.Customer classification departmentation categorizes based upon the differing needs of discrete groups of customers.

68.The form of departmentation that most readily lends itself to use of profit centers is

- A.Project.
- B.Functional.
- C.Product.
- D.Matrix.

Answer (C) is correct.

Departmentation by product is growing in importance for multiline, large-scale enterprises. It is an outgrowth of functional departmentation and permits extensive authority for a division executive over a given product or product line. Its advantages include better use of specialized resources and skills, ease of coordination of the activities for a given product, and simpler assignment of profit responsibility. It is compatible with a decentralization strategy and provides, via product profit centers, a basis for allocating capital more efficiently.

- A.A profit center is an organizational unit responsible for costs and revenues on an ongoing basis, not just for a one-time activity.

B.The profitability of a single function is difficult to measure.

D.Matrix is used for a specific project or for R&D.

69.Which of the following elements of an organization requires people to be accountable to superiors?

A.Coordination of effort.

B.Division of labor.

C.Common goal or purpose.

D.Hierarchy of authority.

Answer (D) is correct.

A hierarchy of authority requires people to be accountable to their superiors in the hierarchy.

A.Coordination of effort involves cooperation in the social environment of the organization.

B.Division of labor ensures efficient specialization of employees.

C.A common goal or purpose is relevant to the employees and employer achieving a common objective.

70.A claimed advantage of decentralizing is

A.Concentration of authority.

B.Manager development.

C.Elimination of duplication of effort.

D.Elimination of inessential operations.

Answer (B) is correct.

When an organization changes from a centralized to a decentralized structure, top management is delegating more authority to middle and lower levels. Thus, managers at these lower levels are usually hired and developed more rigorously than under the centralized structure.

A.Authority is more concentrated in centralized management structures.

C. Some effort will inevitably be duplicated under decentralization, of which departmentation is a moderate form.

D. Elimination of unsuccessful or inessential operations to increase the entity's focus is supportive of greater centralization.

71. Which of the following is a benefit of decentralization?

A. The head of the company is aware of and can influence all decisions before they are made.

B. The company is operated as one unit.

C. Specialists for a particular product have no authority but advise the company's top management.

D. Decisions are made on a more timely basis.

Answer (D) is correct.

Decentralization is the extent to which decision-making power is delegated within an entity. When approval from upper-level management is not required, lower-level managers can make more timely decisions because they are closer to the necessary sources of information.

A. The head of the company being aware of and being able to influence all decisions before they are made typifies a highly centralized entity.

B. Operating the company as one unit typifies a highly centralized entity.

C. Decentralization would give these specialists more authority.

72. Which of the following is not a characteristic of decentralized organizations?

A. Decentralized organizations are usually more flexible.

B. Decentralized organizations have reduced costs through resource sharing.

C. Decentralized organizations have fewer decisions made lower in the hierarchy that are monitored by senior management.

D. Decentralization has a positive influence on morale.

Answer (B) is correct.

The main benefits of centralization are more effective control and reduced costs through resource sharing. In a centralized organization, senior management is able to direct control over subordinates

and direct the flow of resources. Senior management is able to allocate costs most effectively because they are aware of where expenses can be reduced across departments within an organization.

A. The main benefit to decentralized organizations is that they are more flexible and quickly adapt to changes. Therefore, decentralized organizations tend to thrive in relatively unstable or uncertain environments.

C. A main feature of decentralization is for senior management to allow subordinates to make decisions without constant supervision or approval.

D. Decentralization has been shown to improve employee morale by empowering employees to make decisions on their own.

73. Centralization and decentralization are defined according to the relative delegation of decision-making authority by top management. Many managers believe that decentralized organizations have significant advantages over centralized organizations. A major advantage of a decentralized organization is that decentralized

A. Organizations are easier to control.

B. Structures streamline organizations and eliminate duplication of resources.

C. Organizations have fewer managers than centralized organizations.

D. Organizations encourage increased initiative among employees.

Answer (D) is correct.

A decentralized organization allows lower-level employees to participate in decision making. This increased involvement encourages initiative and creative thinking and is especially appropriate in complex and rapidly changing environments.

A. Decentralized organizations are more difficult to control.

B. Centralized structures streamline organizations and eliminate duplication of resources.

C. The number of managers is not related to the degree of centralization or decentralization but is a function of the span of control.

74. The belief that successful leadership occurs when the leader's style matches the situation is the basis for

- A.The contingency approach to leadership.
- B.The managerial-grid model of leadership.
- C.A behavioral approach to leadership.
- D.An achievement-oriented approach to leadership theories.

Answer (A) is correct.

According to Fred E. Fiedler’s contingency theory, people become leaders not only because of personality attributes, but also because of various situational factors and the interaction between the leaders and the situation. Thus, the right person at the right time may rise to a position of leadership if his or her personality and the needs of the situation complement each other. The same person might not become a leader in different circumstances because of failure to interact successfully with that situation. The contingency theory model has three dimensions. (1) Position power is a function of the formal authority structure. It is the degree to which the position held enables a leader to evaluate, reward, sanction, or promote the group members independent of other sources of power, such as personality or expertise. (2) Task structure is how clearly and carefully members’ responsibilities for various tasks are defined. Quality of performance is more easily controlled when tasks are clearly defined. (3) Leader-member relations reflect the extent to which group members like, trust, and are willing to follow a leader.

B.The managerial-grid model is based on the assumption that the team management style is the most effective regardless of the situation. It is therefore not consistent with the contingency view of leadership.

C.The behavioral approach does not focus on the situation or the match between the leader and the situation. Instead, the focus is on identification of leadership behaviors. The issue of contingent behaviors (matching behaviors with the situation) is not central to the behavioral approach.

D.An achievement-oriented approach to any leadership theory involves setting challenging goals and is not contingent on the situation. However, in path-goal theory, the term “achievement-oriented” is used narrowly to describe a facilitator-leader style that is appropriate when tasks are nonrepetitive and employee competence is high.

75.A manager discovers by chance that a newly hired employee has strong beliefs that are very different from the manager’s and from those of most of the other employees. The manager’s best course of action would be to

- A.Facilitate the reassignment of the new hire as quickly as possible before this situation becomes disruptive.
- B.Ask the rest of the team for their reaction and act according to the group consensus.
- C.Take no action unless the new hire’s behavior is likely to cause harm to the organization.
- D.Try to counsel the new hire into more reasonable beliefs.

Answer (C) is correct.

The only legitimate grounds on which the supervisor may take action is the employee's behavior. Personal beliefs, such as those on religious and political matters, cannot be the basis of personnel actions. Discrimination on the basis of personal beliefs could expose the organization to legal action.

- A. Personal beliefs alone are not an appropriate basis for managerial action.
- B. Personal beliefs alone are not an appropriate basis for managerial action.
- D. Personal beliefs alone are not an appropriate basis for managerial action.

76. Performance appraisal systems might use any of three different approaches: (1) who did the job, (2) how the job was done, or (3) what was accomplished. Which approach is used by a system that places the focus on how the job was done?

- A. Behavior-oriented.
- B. Goal-oriented.
- C. Trait-oriented.
- D. Employee-oriented.

Answer (A) is correct.

Behavior-oriented performance evaluation rewards the behavior that is desired by management. Behavior control involves examining work processes rather than work output.

- B. The goal-oriented approach measures how well the employee attained the objectives or goals set by management.
- C. A trait-oriented approach tends to reward what the supervisor thinks of the employee rather than the job the employee did.
- D. An employee-oriented approach would focus on who did the job.

77. When faced with the problem of filling a newly created or recently vacated executive position, organizations must decide whether to promote from within or hire an outsider. One of the disadvantages of promoting from within is that

- A. Internal promotions can have a negative motivational effect on the employees of the firm.
- B. Internal promotions are more expensive to the organization than hiring an outsider.

C.It is difficult to identify proven performers among internal candidates.

D.Hiring an insider leads to the possibility of social inbreeding within the firm.

Answer (D) is correct.

Hiring an internal candidate can lead to social inbreeding. Many firms look to external candidates for certain jobs because they bring a fresh perspective to the organization's problems and may have more up-to-date training or education.

A.Internal promotions usually lead to increased motivation among employees.

B.Internal promotions are less expensive. The firm can avoid the expenses associated with an executive search and certain training costs.

C.It is more difficult to identify proven performers from among outside candidates than internal candidates.

78.Evaluating performance is not done to

A.Determine the amount of nondiscriminatory benefits that each employee deserves.

B.Assess the available human resources of the firm.

C.Motivate the employees.

D.Determine which employees deserve salary increases.

Answer (A) is correct.

Evaluations reinforce accomplishments, help in assessing employee strengths and weaknesses, provide motivation, assist in employee development, permit the organization to assess its human resource needs, and serve as a basis for wage increases. Nondiscriminatory benefits are given to everyone in the organization in equal amounts, regardless of title, pay, or achievement of objectives.

B.Performance evaluation is done to assess the available human resources of the firm.

C.Performance evaluation is done to motivate the employees.

D.Performance evaluation is done to determine which employees deserve salary increases.

79. An organization has a compensation system for its managers based on a management-by-objectives (MBO) approach. The essential premise of MBO is that

- A. Compensation should be based on qualitative factors.
- B. Employees should be concerned with routine matters, and managers should attend to exceptions.
- C. Employees should participate in setting objectives.
- D. Managers should establish objectives for their employees.

Answer (C) is correct.

MBO involves mutual setting of objectives by the superior and the subordinate as a basis for performance evaluation. Based on the Theory Y philosophy that employees want to work hard if they know what is expected, MBO requires (1) senior management participation and commitment to the program, (2) integration of the objectives for all subunits into a compatible system directed toward accomplishment of organizational objectives, (3) provision for regular reporting of performance, and (4) free and honest communication between superior and subordinates. Subordinates must make careful assessments of their abilities and their interests, and managers must coach subordinates rather than dictate their proper objectives. Both sides must maintain flexibility to accommodate unforeseen changes, and the review and analysis of results before setting the next round of objectives is a vital part of the process.

- A. MBO objectives may be set in terms of quantitative measures (such as sales) or qualitative ones (such as improved service).
- B. The essence of management by exception is that employees should be concerned with routine matters, and managers should attend to exceptions.
- D. Setting of objectives should be participative.

80. Management by objectives (MBO) managers are most likely to believe that employees

- A. Dislike their work.
- B. Avoid responsibility whenever possible.
- C. Work best when threatened with punishment.
- D. Are self-motivated.

Answer (D) is correct.

MBO managers believe that employees are committed to achieving objectives, working hard to receive the rewards of achievement, and striving for self-actualization. The MBO view is that employees enjoy work, need little supervision, seek responsibility, and are imaginative problem solvers.

A.MBO is based on the philosophy that employees want to work hard if they know what is expected.

B.The belief that employees want to avoid responsibility is a characteristic of the old “Theory X” school of management.

C.The belief that employees are best motivated by the fear of punishment is a characteristic of the old “Theory X” school of management.

81.Which interview question is the least structured?

A.“Tell me about yourself.”

B.“Describe a situation in which you dealt with difficulty at work. Who was involved? What was the result?”

C.“A very angry customer walks up to your desk and complains about the service provided by your employees. How would you handle this situation?”

D.“After repairing a piece of machinery, why would you clean all the parts before reassembling them?”

Answer (D) is correct.

MBO managers believe that employees are committed to achieving objectives, working hard to receive the rewards of achievement, and striving for self-actualization. The MBO view is that employees enjoy work, need little supervision, seek responsibility, and are imaginative problem solvers.

A.MBO is based on the philosophy that employees want to work hard if they know what is expected.

B.The belief that employees want to avoid responsibility is a characteristic of the old “Theory X” school of management.

C.The belief that employees are best motivated by the fear of punishment is a characteristic of the old “Theory X” school of management.

82.Which of the following are recommended practices that an organization should follow for effective risk management and control of outsourced business processes?

- 1) **Document the outsourced process and indicate which key controls have been outsourced**
- 2) **Ensure there are means of monitoring the effectiveness of the outsourced process**
- 3) **Obtain assurance that the internal controls embedded in the outsourced process are operating effectively, either through internal audits of such controls or an external review of these controls**
- 4) **Periodically reevaluate whether the business case for outsourcing the process remains valid**

A.1 and 2.

B.1, 2, and 3.

C.1 and 3.

D.1, 2, 3, and 4.

Answer (D) is correct.

These are all recommended practices that an organization should follow for effective risk management and control of outsourced business processes.

A.Organizations should also obtain assurance about the effectiveness of internal control and reevaluate whether the business case for outsourcing remains valid.

B.Organizations should also reevaluate whether the business case for outsourcing remains valid.

C.Organizations should also ensure there are means of monitoring the effectiveness of the outsourced process and reevaluate whether the business reason for outsourcing remains valid.

83.In some organizations, internal audit functions are outsourced. Management in a large organization should recognize that the external auditor may have an advantage, compared with the internal auditor, because of the external auditor's

A.Familiarity with the organization. Its annual audits provide an in-depth knowledge of the organization.

B.Size. It can hire experienced, knowledgeable, and certified staff.

C.Size. It is able to offer continuous availability of staff unaffected by other priorities.

D.Structure. It may more easily accommodate engagement requirements in distant locations.

Answer (D) is correct.

Large organizations that are geographically dispersed may find outsourcing internal audit functions to external auditors to be effective. A major public accounting firm ordinarily has operations that are national or worldwide in scope.

A.The internal auditors are likely to be more familiar with the organization than the external auditors, given the continuous nature of their responsibilities.

B.The internal auditor also can hire experienced, knowledgeable, and certified staff.

C.The internal auditor is more likely to be continuously available. The external auditor has responsibilities to many other clients.

84.An organization must manage its flows of materials, components, finished goods, services, or information through intermediaries to ultimate consumers. These flows may occur across the functions in an organization's

- A.Supply chain.
- B.Value chain.
- C.Full-function chain.
- D.Integrated chain.

Answer (B) is correct.

The supply chain consists of flows from sources of (1) materials, (2) components, (3) finished goods, (4) services, or (5) information through intermediaries to ultimate consumers. These flows and the related activities may occur across the functions in an organization's value chain (R&D, design, production, marketing, distribution, and customer service). These flows and the related activities also may occur across separate organizations.

- A.The supply chain consists of the flows that may occur across the functions in an organization's value chain or separate organizations.
- C.The phrase "full-function chain" is not a technical term
- D.The phrase "integrated chain" is not a technical term

85.A desired result of the sharing of information by all functions and organizations in the supply chain is

- A.Fewer rush orders.
- B.Maximization of inventories held by suppliers, manufacturers, and retailers.
- C.Stockouts.
- D.Incompatibility of the information systems of the parties.

Answer (A) is correct.

Sharing information about sales, inventory, pricing, advertising campaigns, and sales forecasts by all functions and organizations in the supply chain moderates demand uncertainty for all parties. The desired results are (1) minimization of inventories held by suppliers, manufacturers, and retailers; (2) avoidance of stockouts; (3) fewer rush orders; and (4) production as needed by retailers.

B. Minimization of inventories held by all parties in the supply chain is a desired result of sharing information.

C. Avoidance of stockouts is a desired result of sharing information.

D. Incompatibility of the information systems of the parties is a difficulty faced by supply-chain management, not a desired result of sharing information.

86. Which of the following are intermediaries between sellers and buyers?

1. Agent
2. Broker
3. Consignee
4. Consumer

A. 1 and 2 only.

B. 1 and 3 only.

C. 1, 2, and 3 only.

D. 1, 2, 3, and 4.

Answer (C) is correct.

A distribution channel is a series of interdependent marketing institutions that facilitate the transfer of a product from producer (seller) to consumer (buyer). Intermediaries include merchant middlemen, agents, brokers, consignees, and facilitating intermediaries.

A. A consignee is also an intermediary between sellers and buyers.

B. A broker is an intermediary.

D. A broker is an intermediary.

87. The airlines have been leaders in the use of technology. Customers can make reservations either with an airline or through a travel agency. In this situation, a travel agency is classified as which type of distribution channel?

- A. An intermediary.
- B. A jobber.
- C. A distributor.
- D. A facilitating agent.

Answer (A) is correct.

Marketing intermediaries assist companies in promoting, selling, and distributing their goods and services to ultimate consumers. For example, travel agents access an airline's computerized reservation system and make reservations for their customers without ever taking title to the ticket.

- B. Jobbers buy from manufacturers, then resell the products.
- C. Distributors, or wholesalers, usually have selective or exclusive distribution rights.
- D. Facilitating agents assist in functions other than buying, selling, or transferring title.

88. Physical distribution is the moving of finished products to

- A. Retail outlets.
- B. Shipping point.
- C. Consumers.
- D. Warehouses.

Answer (C) is correct.

Physical distribution is the efficient management of supply chains. It controls value-added flows from suppliers to consumers.

- A. Physical distribution is the efficient movement of finished products to consumers
- B. Physical distribution is the efficient movement of finished products to consumers.
- D. Physical distribution is the efficient movement of finished products to consumers.

89.Intensive distribution is most likely to be used for

- A.Shopping goods.
- B.Specialty goods.
- C.Convenience goods.
- D.Unsought goods.

Answer (C) is correct.

Convenience goods are consumer goods and services that are usually low-priced and widely available. Consumers buy them often and with a minimum of comparison and effort. Examples are soap and newspapers. Producers of convenience goods ordinarily use intensive distribution to sell their products through a large number of retail or wholesale units.

- A.Shopping goods are usually sold through selective distribution.
- B.Specialty goods are usually sold through selective or exclusive distribution.
- D.Unsought goods, e.g., life insurance, are often marketed through personal selling

90.Which of the following is not a component of physical distribution?

- A.Transportation.
- B.Pricing.
- C.Location of retail outlets.
- D.Warehousing.

Answer (B) is correct.

Physical distribution (market logistics) involves planning, implementing, and controlling the movement of materials and final goods to meet customer needs while earning a profit. Physical distribution systems coordinate suppliers, purchasing agents, marketers, channels, and customers. They include warehousing, transportation, and retail outlets.

- A.A physical distribution system includes transportation.
- C.A physical distribution system includes the location of retail outlets.

D.A physical distribution system includes warehousing.

91.A 25% markup on price is equal to a markup on cost of

- A.100%
- B.33 1/3%
- C.50%
- D.75%

Answer (B) is correct.

A markup is the difference between the cost (C) of a product and its selling price (P). The following assumes a 25% markup on price:

$$P - C = 25\% P$$

$$C = 75\% P$$

$$\text{Markup on cost} = (\text{profit} \div \text{cost}) = (25\% P \div 75\% P) = 33 \frac{1}{3}\%$$

The markup on cost is 33 1/3%.

- A.A markup on cost of 100% is equivalent to a markup on price of 50%
- C.A markup on cost of 50% is equivalent to a markup on price of 33 1/3%.
- D.A markup on cost of 75% is equivalent to a markup on price of 42.9%.

92.In a well-designed internal control system, the same employee may be permitted to

- A.Mail signed checks and also cancel supporting documents.
- B.Prepare receiving reports and also approve purchase orders.
- C.Approve vouchers for payment and also have access to unused purchase orders.
- D.Mail signed checks and also prepare bank reconciliations.

Answer (A) is correct.

The cash disbursements department has an asset custody function. Consequently, this department is responsible for signing checks after verification of their accuracy by reference to the supporting documents. The supporting documents should then be canceled and the checks mailed. Cancellation prevents the documentation from being used to support duplicate payments. Moreover, having the party who signs the checks place them in the mail reduces the risk that they will be altered or diverted.

B.The receiving department should not know how many units have been ordered.

C.Accounts payable is responsible for approving vouchers, and purchasing is the only department with access to the purchase orders. The same employee should not approve the purchase and approve payment.

D.The bank reconciliation is performed by someone with no asset custody function.

93.For effective internal control, the accounts payable department ordinarily should

A.Obliterate the quantity ordered on the receiving department copy of the purchase order.

B.Establish the agreement of the vendor's invoice with the receiving report and purchase order.

C.Stamp, perforate, or otherwise cancel supporting documentation after payment is mailed.

D.Ascertain that each requisition is approved as to price, quantity, and quality by an authorized employee.

Answer (B) is correct.

The accounts payable department is responsible for matching the vendor's invoice against the corresponding purchase order and receiving report. This procedure provides assurance that a valid transaction has occurred and that the parties have agreed on the terms, such as price and quantity.

A.The purchasing department is responsible for sending copies of the purchase order to the different departments.

C.The cash disbursements department is responsible for canceling supporting documentation when checks are signed.

D.The purchasing department is responsible for approving each requisition.

94.Which of the following internal control activities is not usually performed in the vouchers payable department?

A.Matching the vendor's invoice with the related receiving report.

B.Approving vouchers for payment by having an authorized employee sign the vouchers.

- C. Indicating the asset and expense accounts to be debited.
- D. Accounting for unused prenumbered purchase orders and receiving reports.

Answer (D) is correct.

Employees in the vouchers payable department should have no responsibilities related to purchasing or receiving goods. The purchasing department accounts for unused prenumbered purchase orders. The receiving department accounts for unused prenumbered receiving reports.

- A. Matching the vendor's invoice with the related receiving report, purchase requisition, and purchase order is a function of the vouchers payable department.
- B. Signing of vouchers by an authorized employee to signify that information has been verified is a function of the vouchers payable department.
- C. Indicating the affected accounts on the voucher is a function of the vouchers payable department.

95. The authority to accept incoming goods in receiving should be based on a(n)

- A. Vendor's invoice.
- B. Materials requisition.
- C. Bill of lading.
- D. Approved purchase order.

Answer (D) is correct.

A receiving department should accept merchandise only if a purchase order or approval granted by the purchasing department is on hand.

- A. The vendor's invoice does not indicate whether purchase of the goods was properly authorized by someone outside the receiving department.
- B. Materials requisition does not indicate whether purchase of the goods was properly authorized by someone outside the receiving department.
- C. The carrier's bill of lading does not indicate whether purchase of the goods was properly authorized by someone outside the receiving department.

96. Internal control is strengthened when the quantity of merchandise ordered is omitted from the copy of the purchase order sent to the

- A. Department that initiated the requisition.
- B. Receiving department.
- C. Purchasing agent.
- D. Accounts payable department.

Answer (B) is correct.

A receiving department should accept merchandise only if a purchase order or approval granted by the purchasing department is on hand. A standard control is to delete the quantity from the receiving department's copy of the purchase order. If the receiving clerk does not know the quantity ordered, an independent count is more likely.

- A. The department that initiated the requisition presumably knows what amount was ordered.
- C. The purchasing agent is responsible for authorizing the purchase order.
- D. The accounts payable department must compare a duplicate of the original purchase order with the receiving report and other documents before it can prepare a payment voucher.

97. In testing controls over cash disbursements, an auditor most likely would determine that the person who signs checks also

- A. Reviews the monthly bank reconciliation.
- B. Returns the checks to accounts payable.
- C. Is denied access to the supporting documents.
- D. Is responsible for mailing the checks.

Answer (D) is correct.

The person responsible for signing the checks also should be responsible for assuring that the checks are mailed. This precaution assures limited access to the checks once they are signed.

- A. The bank reconciliation should not be reviewed by someone with responsibility for custody of assets.
- B. Checks should be returned to the treasury (CFO) department
- C. Supporting documentation should be presented to the check signer as authorization to sign the check. That documentation should be canceled after the check is signed.

98. Which of the following procedures in the cash disbursements cycle should not be performed by the accounts payable department?

- A. Comparing the vendor's invoice with the receiving report.
- B. Canceling supporting documentation after payment.
- C. Verifying the mathematical accuracy of the vendor's invoice.
- D. Approving the voucher for payment by an authorized person.

Answer (B) is correct.

Checks for disbursements should be signed by a responsible person in the cash disbursements department after necessary supporting evidence has been examined. This individual therefore should be responsible for canceling the supporting documentation after payment.

- A. The accounts payable department is responsible for preparing a voucher, which includes comparing the vendor's invoice with the receiving report.
- C. The accounts payable department is responsible for determining the mathematical accuracy of the vendor's invoice.
- D. The accounts payable department has an authorized person approve the voucher for payment.

99. To avoid potential errors and fraud, well-designed internal control in the accounts payable area should include a segregation of which of the following functions?

- A. Cash disbursements and vendor invoice verification.
- B. Vendor invoice verification and merchandise ordering.
- C. Physical handling of merchandise received and preparation of receiving reports.
- D. Check signing and cancellation of payment documentation.

Answer (A) is correct.

The functions of cash disbursements (custody of assets) and invoice verification (recordkeeping) should be segregated for effective internal control. Invoice verification should be done by an employee outside the CFO's department.

- B. Vendor invoice verification and merchandise ordering should be combined, not segregated.
- C. Physical handling of merchandise received and preparation of receiving reports should be combined, not segregated.
- D. Check signing and cancellation of payment documentation should be combined, not segregated.

100. Which of the following questions is inappropriate on an internal control questionnaire concerning purchase transactions?

- A. Are an approved purchase requisition and a signed purchase order required for each purchase?
- B. Are prenumbered purchase orders and receiving reports used and accounted for?
- C. Are all goods received in a centralized receiving department and counted, inspected, and compared with purchase orders on receipt?
- D. Are intact cash receipts deposited daily in the bank?

Answer (D) is correct.

The question about the daily deposit of intact cash receipts is related to the cash receipts cycle, not the purchases-payables-cash disbursements cycle.

- A. A question about the requirement of an approved purchase requisition and a signed purchase order is relevant to internal control over purchase transactions.
- B. A question about the use of prenumbered purchase orders and receiving reports is relevant to internal control over purchase transactions.
- C. A question about activities of a centralized receiving department is relevant to internal control over purchase transactions.

PART 3 UNIT-4

1.A project is an undertaking with a specific beginning and end, but it may have a long duration.

A project

- A.May be part of a phase consisting of related projects.
- B.May contain multiple programs and related activities.
- C.Should be documented in a business case.
- D.Has deliverables that include a benefits management plan.

Answer (C) is correct.

A project should realize an opportunity consistent with an entity's strategic goals. A business case therefore is prepared prior to the project to document its objectives, investments, and success criteria.

- A.The project life cycle is the set of phases of a project. For example, a project might have such phases as feasibility study, design, prototyping, and testing. A phase is a set of related activities that end with completion of a deliverable(s).
- B.A project may be part of a program, that is, a set of related projects and program activities managed together to obtain the benefits of synergy.
- D.A benefits management plan is prepared prior to the project. It states how and when benefits will be delivered and the measurement methods. This plan is a business document external to the project, not a project document.

2.Stakeholders of a project most likely include

- A.The project manager and team members.
- B.Only those who provide resources and support.
- C.Parties as diverse as full sponsors and survey participants.
- D.Such internal individuals and entities as suppliers and shareholders.

Answer (C) is correct.

Stakeholders are individuals, groups, and organizations that are affected by or affect the project. Stakeholders may be individuals or entities in a spectrum from survey participants to full sponsors

providing financial and political support. Project success depends on engaging stakeholders and effectively managing their expectations.

A.A project manager leads the team responsible for achieving project objectives and stakeholder satisfaction. Project management applies knowledge, skills, and techniques to activities that meet its requirements. It involves attending to the communication and other needs and expectations of stakeholders. But team members are internal stakeholders.

B.Stakeholders may be individuals or entities in a spectrum from survey participants to full sponsors providing financial and political support.

D.Examples of external stakeholders are suppliers, customers, end users, shareholders, and regulators.

3.A project charter is most likely developed in which project management process group?

A.Initiating.

B.Planning.

C.Definition of activities.

D.Defining scope.

Answer (A) is correct.

Initiating processes define a new project or phase by securing authorization to begin. Stakeholder expectations should be consistent with the project's objectives and scope. The initial scope and financial investment are defined, and stakeholders who will influence outcomes are identified. For example, a project charter is developed to authorize the use of resources for project activities.

B.Planning processes define the project scope, objectives, and actions to achieve those objectives. Also, the project management plan and project documents are developed. But developing a charter is an initiating process.

C.Definition of activities is a planning process, not a project management process group. Definition of activities identifies the actions needed to generate deliverables as a basis for controlling work.

D.Defining scope is a planning process, not a project management process group. Defining scope describes the project in detail, including acceptance criteria.

4.Which of the following is a project management process group?

A.Applying applications.

- B.Executing.
- C.Estimating costs.
- D.Identifying stakeholders.

Answer (B) is correct.

Executing is a project management process group. Executing processes complete planned work in accordance with project requirements. They coordinate resources, integrate and perform activities, and manage stakeholder engagement. Thus, they consume much of the project's budget, resources, and time. They also may result in approved change requests that amend the plan, documents, and baselines.

- A.The project management process groups are sets of processes used to achieve objectives. They are distinct from (1) applications (e.g., IT or accounting) or (2) the nature of the industry (e.g., banking, manufacturing, or social media).
- C.Estimating costs is a planning process, not a project management process group.
- D.Identifying stakeholders is an initiating process, not a project management process group.

5.Which of the following is a project management knowledge area?

- A.Monitoring and controlling processes.
- B.Organizational process assets.
- C.Project documents.
- D.Integration processes.

Answer (D) is correct.

Project management knowledge areas are sets of processes required for most projects most of the time. For example, integration processes define, combine, and coordinate the processes and activities within the project management process groups.

- A.Monitoring and controlling processes is a project management process group
- B.Organizational process assets (OPAs) are specific (internal) to an entity. They are its plans, processes, policies, procedures, and knowledge bases that affect project management. They are project artifacts.
- C.Project documents are artifacts not included in the project management plan but that may be used to manage the project.

6.The project management plan

- A.Is tailored to the specific project.
- B.Includes project documents.
- C.Includes business documents internal to the project.
- D.Is an output of the project.

Answer (A) is correct.

Artifacts in the project management context are processes, inputs, outputs, organizational process assets, enterprise environmental factors, etc. Tailoring is selection of the artifacts relevant to the unique project. The project management plan is the most commonly used artifact. Tailoring the project management plan involves determining the components required for a specific project. The plan is an input, and updates of the plan are outputs of many processes described in the ANSI standard.

- B.Project documents are artifacts not included in the project management plan but that may be used to manage the project.
- C.The source of a business document is external to the project. But it may be an input to the project. Examples include the business case and benefits management plan.
- D.The project management plan is an input to the project.

7.The project life cycle is the set of phases of a project. During the life cycle,

- A.Costs of changes decrease as the project nears completion.
- B.Stakeholders' ability to influence results without affecting schedules materially is lowest at the start.
- C.Risk increases as deliverables are accepted.
- D.The project may be terminated or changed at the control point.

Answer (D) is correct.

At the control point (also called a phase gate, phase review, or control gate), the project's charter (formal authorization by the initiator or sponsor) and business documents (e.g., business case and benefits management plan prepared before project initiation) are reviewed to compare performance with the project management plan. The result is the project's change, cancelation, or continuation.

A.Risk declines as decisions are made and deliverables are accepted. But costs of changes in the project significantly increase.

B.Risk and stakeholders' ability to influence the final result without a material effect on cost and scheduling are highest at the start.

C.Risk decreases as decisions are made and deliverables are accepted.

8.The ANSI has issued a standard on project management. According to the standard, which of the following is a generic phase of the project life cycle?

A.Planning.

B.Closing.

C.Charting.

D.Sponsoring.

Answer (B) is correct.

A phase is a set of logically related activities that end with completion of a deliverable(s). The project life cycle is the set of phases of a project. Regardless of the nature of a project, it has four generic phases: (1) starting the project, (2) organizing and preparing, (3) doing the work, and (4) closing (ending the project). Closing also is the project management process group that includes processes to formally terminate a project, phase, or contract.

A.Planning is the project management process group that includes processes to define the project scope, objectives, and actions to achieve the objectives.

C.A project charter is developed to authorize the use of resources for project activities. The charter is generally created before starting the project.

D.A sponsor of a project, program, or portfolio provides resources and support. The sponsor ordinarily is accountable for the business document. Sponsoring occurs throughout the cycle.

9.In the project management context, a benefits management plan is an artifact best described as a

A.Business document.

B.Project document.

C.Business case.

D.Organizational process asset.

Answer (A) is correct.

The source of a business document is external to the project. But it may be an input to the project. Project documents are artifacts not included in the project management plan but that may be used to manage the project. The choice of such documents is a function of the requirements of the project and the project manager's judgment. Updated project documents are outputs of processes. A benefits management plan is prepared prior to the project. It states how and when benefits will be delivered and the measurement methods. Consequently, a benefits management plan is a business, not a project, document.

B. Examples of project documents are those that may relate to scope, requirements, resources, activities, costs, milestones (significant points or events), communications, scheduling, quality, risks, and lessons learned. They are not external to the project.

C. The sponsor ordinarily is accountable for the business case document. It is external to the project, but it does not state how and when benefits will be delivered or the measurement methods.

D. Organizational process assets (OPAs) are specific (internal) to an entity. They are its plans, processes, policies, procedures, and knowledge bases that affect project management.

10. Lessons learned repositories relevant to a project are

A. External enterprise environmental factors.

B. Organizational process assets.

C. Internal enterprise environmental factors.

D. Baselines.

Answer (B) is correct.

Organizational process assets (OPAs) are specific (internal) to an entity. They are its plans, processes, policies, procedures, and knowledge bases that affect project management. Examples are change controls, financial controls, work instructions, and knowledge repositories (such as historical information and lessons learned repositories).

A. Enterprise environmental factors (EEFs) are external to the project but influence, limit, or direct the project. They may be internal or external to the entity. An example category of external EEFs may consist of financial factors (e.g., exchange and interest rates, inflation, tariffs, and location).

C. Enterprise environmental factors (EEFs) are external to the project but influence, limit, or direct the project. They may be internal or external to the entity. An example category of internal EEFs may consist of the entity's culture, structure, and governance (e.g., mission, cultural norms, hierarchy, ethics, and leadership style).

D.Baselines (e.g., scope, schedule, performance measurement, and cost) have possible components of the project management plan. A baseline is an approved work product changeable only by formal procedures. It is a basis for comparison with an actual result.

11.Progressive elaboration occurs in which project management process group?

- A.Directing and managing project work.
- B.Validating scope and controlling scope.
- C.Monitoring and controlling.
- D.Planning.

Answer (D) is correct.

Planning processes define the project scope, objectives, and actions to achieve those objectives. Also, the project management plan and project documents are developed. As more information is obtained, planning and initiating processes may need to be repeated to revise the project management plan. This iterative approach is known as progressive elaboration.

- A.Directing and managing project work includes performing planned work and making approved changes. It is an example of a process in the executing process group.
- B.Validating scope and controlling scope are examples of processes in the monitoring and controlling process group. Validating scope is formal acceptance of each deliverable. Controlling scope monitors project status and project scope and manages changes in the scope baseline.
- C.Monitoring and controlling processes track, review, and regulate progress and performance. They also (1) determine whether changes are needed in the project management plan and (2) initiate those changes.

12.A process in which project management process group is most likely to identify stakeholders?

- A.Planning.
- B.Executing.
- C.Initiating.
- D.Conducting procurements.

Answer (C) is correct.

Initiating processes define a new project or phase by securing authorization to begin. Stakeholder expectations should be consistent with the project's objectives and scope. The initial scope and financial investment are defined, and stakeholders who will influence outcomes are identified.

A.Planning stakeholder engagement results in an executable plan for interacting with various parties based on their effects on the project, expectations, etc. But identifying stakeholders is an initiating process.

B.Managing stakeholder engagement entails communication to obtain support through meeting expectations, resolving problems, and promoting involvement. But identifying stakeholders is an initiating process.

D.Conducting procurements is an example of an executing process. Sellers (suppliers) are stakeholders. But initiating processes identify all stakeholders who will influence outcomes.

13.A work breakdown structure typically is developed in which project management process group?

A.Planning.

B.Executing.

C.Monitoring and controlling project work.

D.Directing and managing project work.

Answer (A) is correct.

Creating a work breakdown structure (WBS) reduces the deliverables and work to manageable parts by developing a framework for what is to be done. It is an example of a process in the planning project management process group.

B.Executing processes complete planned work in accordance with project requirements. They coordinate resources, integrate and perform activities, and manage stakeholder engagement.

C.Monitoring and controlling project work is ongoing. It results in communicating the project's current state to stakeholders. This understanding facilitates recognition of corrective steps and anticipation of the future status of the project based on forecasts. It is an example of a process in the monitoring and controlling project management process group.

D.Directing and managing project work includes performing planned work and making approved changes. It is an example of a process in the executing project management process group.

14. Project documents are artifacts that may be used to manage a project. They

- A. Include the business case.
- B. Include the benefits management plan.
- C. Are components of the project management plan.
- D. May relate to such matters as scope, requirements, resources, and costs.

Answer (D) is correct.

Project documents are artifacts not included in the project management plan but that may be used to manage the project. The choice of such documents is a function of the requirements of the project and the project manager's judgment. Updated project documents are outputs of processes. Examples of project documents are those that may relate to scope, requirements, resources, activities, costs, milestones (significant points or events), communications, scheduling, quality, risks, and lessons learned.

- A. The business case is a business document. The source of a business document is external to the project. But it may be an input to the project.
- B. The benefits management plan is a business document. The source of a business document is external to the project. But it may be an input to the project.
- C. Project documents and business documents are not included in the project management plan.

15. In a project management application, enterprise environmental factors (EEFs)

- A. Are external to the project and the entity.
- B. May consist of the entity's culture and governance.
- C. May consist of change controls and financial controls.
- D. Include organizational process assets.

Answer (B) is correct.

Enterprise environmental factors (EEFs) are external to the project but influence, limit, or direct the project. They may be internal or external to the entity. An example category of internal EEFs may consist of the entity's culture, structure, and governance (e.g., mission, cultural norms, hierarchy, ethics, and leadership style).

A.EEFs also may be internal to the entity.

C.Change controls and financial controls are examples of organizational process assets.

D.Organizational process assets (OPAs) are specific (internal) to an entity. They are its plans, processes, policies, procedures, and knowledge bases that affect project management.

16.The project management process groups are sets of processes used to achieve objectives. Examples of processes in the planning process group are

A.Scope processes and cost processes.

B.Estimating activity durations and quality processes.

C.Qualitative risk analysis and quantitative risk analysis.

D.Managing project knowledge and definition of activities.

Answer (C) is correct.

Planning processes define the project scope, objectives, and actions to achieve those objectives. Examples are qualitative risk analysis and quantitative risk analysis. Qualitative risk analysis establishes risk priorities based on probabilities and potential effects. Quantitative risk analysis mathematically aggregates the effects of uncertainties on project objectives as a basis for (1) estimating total risk exposure and (2) responding to risks.

A.Scope processes and cost processes are project management knowledge areas. Scope processes limit the work only to that needed to complete the project successfully. Cost processes (e.g., estimating, budgeting, funding, and controlling) should keep the project within the budget.

B.Quality processes is a project management knowledge area. Quality processes reflect the entity's policy for project and product quality. They apply to planning, management, and controlling project and product quality to meet stakeholders' expectations.

D.Managing project knowledge is an example of executing processes. Managing project knowledge involves reaching objectives and improving the entity's learning by using current, and generating new, knowledge.

17.Approved change requests are most likely to result from which project management process group?

A.Planning scope and collecting requirements.

B.Planning.

C.Initiating.

D.Executing.

Answer (D) is correct.

Executing processes complete planned work in accordance with project requirements. They coordinate resources, integrate and perform activities, and manage stakeholder engagement. Thus, they consume much of the project's budget, resources, and time. They also may result in approved change requests that amend the plan, documents, and baselines. Furthermore, monitoring and controlling processes track, review, and regulate progress and performance. They also (1) determine whether changes are needed in the project management plan and (2) initiate those changes. Integrated change control processes review, approve, and manage changes (e.g., in deliverables, process assets, documents, and the plan). They also communicate the decisions. The benefit is documentation of integrated changes after consideration of project risk.

A.Planning scope and collecting requirements are examples of processes in the planning processes group. Planning scope management is documenting a plan for the definition, validation, and control of the project and its scope. Collecting requirements documents and manages stakeholder needs and requirements to achieve objectives as a basis for defining scope.

B.Planning processes define the project scope, objectives, and actions to achieve those objectives.

C.Initiating processes define a new project or phase by securing authorization to begin. Stakeholder expectations should be consistent with the project's objectives and scope. The initial scope and financial investment are defined, and stakeholders who will influence outcomes are identified.

18.The project management process groups are sets of processes used to achieve objectives. According to the ANSI standard on project management,

A.A process is a sequential set of activities that may or may not have an output.

B.Some processes, such as obtaining resources, are continuous throughout the project.

C.Outputs of processes generally are inputs to other processes.

D.Monitoring processes are reported as required.

Answer (C) is correct.

A process is a sequential set of activities intended to produce a result so that at least one input is acted on to generate at least one output. Ordinarily, outputs of processes (e.g., the project management plan and project documents resulting from the planning processes, such as a risk register of outputs of risk management processes) are inputs to other processes (e.g., executing processes).

- A. A process has at least one input and one output.
- B. Some processes, e.g., obtaining resources, are repeated as required but are not continuous.
- D. Some processes, e.g., monitoring and controlling, are continuous until the end of the project.

19. The business case for a project

- A. Is prepared during the planning phase of the project.
- B. Addresses the economic feasibility of the project.
- C. Consists of project documents included in the project management plan.
- D. Is included in the benefits management plan.

Answer (B) is correct.

A project should realize an opportunity consistent with an entity's strategic goals. A business case for the project is a feasibility study prepared prior to the project to document its objectives, investments, and success criteria. The sponsor ordinarily is accountable for the business case document.

- A. The business case is prepared prior to the project.
- C. Project documents are artifacts not included in the project management plan but that may be used to manage the project. The choice of such documents is a function of the requirements of the project and the project manager's judgment. Updated project documents are outputs of processes. The business case is a business document because it is external to the project.
- D. A benefits management plan is prepared prior to the project. It states how and when benefits will be delivered and the measurement methods.

20. The project management process groups are sets of processes used to achieve objectives. Examples of processes in the executing process group are

- A. Managing project knowledge and developing the team.
- B. Definition of activities and sequencing of activities.
- C. Estimating activity durations and acquiring resources.
- D. Managing the team and estimating activity resources.

Answer (A) is correct.

Executing processes complete planned work in accordance with project requirements. They coordinate resources, integrate and perform activities, and manage stakeholder engagement. Examples are managing project knowledge and developing the team. Managing project knowledge involves reaching objectives and improving the entity's learning by using current, and generating new, knowledge. Developing the team involves raising levels of competence and employees' interaction and bettering their environment. The objectives include lower turnover and higher motivation.

B. Definition of activities and sequencing of activities are examples of planning processes. Definition of activities identifies the actions needed to generate deliverables as a basis for controlling work. Sequencing of activities identifies relationships and permits work to be performed in a logical, efficient order.

C. Estimating activity durations is an example of a planning process. Estimating activity durations projects the work times required given specified resources.

D. Estimating activity resources is an example of a planning process. Estimating activity resources determines the kinds, amounts, and nature of materials, equipment, and supplies required to complete the work.

21.A Gantt chart

A. Shows the critical path for a project.

B. Is used for determining an optimal product mix.

C. Shows only the activities along the critical path of a network.

D. Does not necessarily show the critical path through a network.

Answer (D) is correct.

The major advantage of a Gantt chart is its simplicity: It requires no special tools or mathematics. However, it depicts only the interrelationships between tasks in a limited way. Thus, trying to identify a project's critical path from a Gantt chart may not be feasible.

A. The critical path is not shown on a Gantt chart.

B. Linear programming is used to determine an optimal product mix.

C. A Gantt chart shows all activities, not just those along the critical path.

22. When making a cost-time tradeoff in CPM analysis, the first activity that should be crashed is the activity

- A. With the largest amount of slack.
- B. With the lowest unit crash cost.
- C. On the critical path with the maximum possible time reduction.
- D. On the critical path with the lowest unit crash cost.

Answer (D) is correct.

When making a cost-time tradeoff, the first activity to be crashed (have its completion time accelerated) is one on the critical path. To select an activity on another path would not reduce the total time of completion. The initial activity chosen should be the one with the completion time that can be accelerated at the lowest possible cost per unit of time saved.

- A. Eliminating an activity with slack will not reduce the total time of the project.
- B. The activity with the lowest unit crash cost may not be on the critical path.
- C. The time reduction should be related to its cost. The maximum time reduction may not be cost effective.

23. A shortest-route algorithm is used in network models to

- A. Identify bottlenecks in a network and identify the longest path.
- B. Minimize total travel time from one site to each of the other sites in a transportation system.
- C. Maximize throughput in networks with distinct entry (source node) and exit (sink node) points.
- D. Identify the set of connecting branches having the shortest combined length

Answer (B) is correct.

Network models are used to solve managerial problems pertaining to project scheduling, information systems design, and transportation systems design. Networks consisting of nodes and arcs may be created to represent in graphic form problems related to transportation, assignment, and transshipment. The shortest-route, minimal spanning tree, and maximal flow problems are other applications of network models. A shortest-route algorithm minimizes total travel time from one site to each of the other sites in a transportation system.

- A. The critical path method (CPM) is intended to identify bottlenecks in a network and identify the longest path.

C.The maximal flow algorithm maximizes throughput in networks with distinct entry (source node) and exit (sink node) points. Examples of applications are highway transportation systems and oil pipelines. Flows are limited by capacities of the arcs (e.g., highways or pipes).

D.The minimal spanning tree algorithm identifies the set of connecting branches having the shortest combined length. A spanning tree is a group of branches (arcs) that connects each node in the network to every other node. An example problem is the determination of the shortest telecommunications linkage among users at remote sites and a central computer.

24.In a critical path analysis, if slack time in an activity exists, the activity

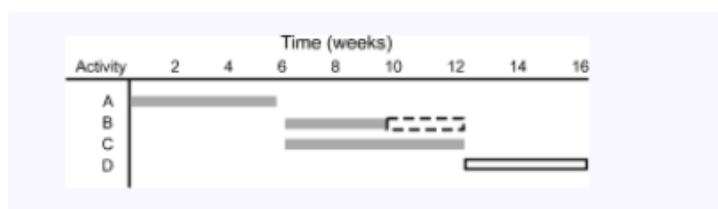
- A.Is not essential to the overall project.
- B.Is a backup activity to replace a main activity should it fail.
- C.Could be delayed without delaying the overall project.
- D.Involves essentially no time to complete.

Answer (C) is correct.

Slack is the free time associated with activities not on the critical path. Slack represents unused resources that can be diverted to the critical path.

- A.An activity with slack may nevertheless be essential to the overall project.
- B.An activity with slack time is not a backup activity.
- D.Time is involved in a slack activity.

25.In the Gantt chart below, shaded bars represent completed portions of activities, bars depicted with broken lines represent uncompleted portions, and blank bars represent activities not yet begun.



As of week 8, the Gantt chart shows that the project is

- A.Complete.
- B.Ahead of schedule.
- C.On schedule.
- D.Behind schedule.

Answer (C) is correct.

Activities B and C are the only activities that should be underway during week 8. Because both are underway and on schedule, the project is on schedule.

- A.Activity B is incomplete, and activity D has not yet been started.
- B.As of week 8, activities B and C are underway, but neither is complete; thus, the project is not ahead of schedule.
- D.As of week 8, activities B and C are underway, but both are expected to finish on time.

26.The process of adding resources to shorten selected activity times on the critical path in project scheduling is called

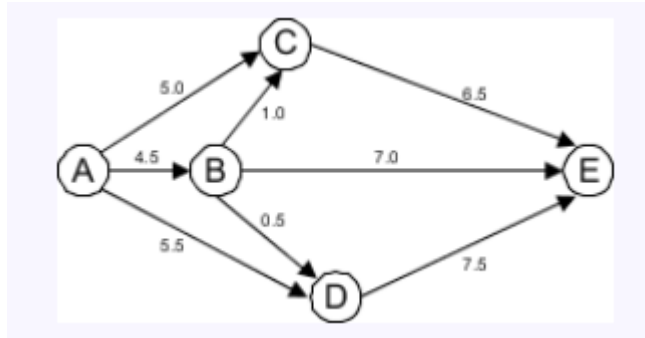
- A.Crashing.
- B.The Delphi technique.
- C.ABC analysis.
- D.A branch-and-bound solution.

Answer (A) is correct.

Crashing is the process of adding resources to shorten activity times on the critical path in project scheduling.

- B.The Delphi technique is a qualitative forecasting approach.
- C.ABC analysis is an inventory model.
- D.The branch-and-bound solution is an integer programming solution.

27.Fact Pattern: The network diagram and the corresponding activity cost chart for a manufacturing project at Networks, Inc., are presented below. The numbers in the diagram are the expected times (in days) to perform each activity in the project.



Activity	Normal Cost	Crash Time	Crash Cost
AB	US \$3,000	3.50 days	US \$4,000
AC	5,000	4.50	5,250
AD	4,000	4.00	4,750
BE	6,000	5.00	7,000
CE	8,000	5.00	9,200
DE	6,000	6.50	6,750
BC	2,500	.50	3,500
BD	2,000	.25	2,500

Q:The expected time of the critical path is

- A.12.0 days.
- B.13.0 days.
- C.11.5 days.
- D.11.0 days.

Answer (B) is correct.

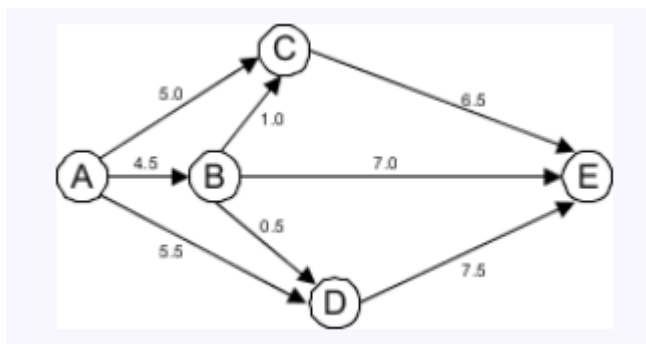
The critical path is the longest path. The longest path in the diagram is A-D-E, which requires 13 days (5.5 + 7.5) based on expected times.

A. The expected time of the critical path is 13.0 days.

C. The expected time of the critical path is 13.0 days.

D. The expected time of the critical path is 13.0 days.

28. Fact Pattern: The network diagram and the corresponding activity cost chart for a manufacturing project at Networks, Inc., are presented below. The numbers in the diagram are the expected times (in days) to perform each activity in the project.



Activity	Normal Time	Crash Cost	Crash Cost
AB	US \$3,000	3.50 days	US \$4,000
AC	5,000	4.50	5,250
AD	4,000	4.00	4,750
BE	6,000	5.00	7,000
CE	8,000	5.00	9,200
DE	6,000	6.50	6,750
BC	2,500	.50	3,500
BD	2,000	.25	2,500

Q.To keep costs at a minimum and decrease the completion time by 1 1/2 days, Networks, Inc., should crash activity(ies)

- A.AD and AB.
- B.DE.
- C.AD.
- D.AB and CE

Answer (A) is correct.

The critical (longest) path is A-D-E, which has an expected time of 13 days ($5.5 + 7.5$). However, to decrease the project's completion time by 1.5 days, paths A-B-C-E ($4.5 + 1 + 6.5 = 12$ days) and A-B-D-E ($4.5 + .5 + 7.5 = 12.5$ days) as well as A-D-E must also be shortened. Hence, A-D-E must be reduced by 1.5 days, A-B-C-E by .5 days, and A-B-D-E by 1 day. The only way to decrease A-D-E by 1.5 days is to crash activity AD (5.5 expected time $- 4$ crash time = 1.5 days). Crashing DE results in a 1-day saving ($7.5 - 6.5$) only. Crashing AB is the efficient way to reduce both A-B-C-E and A-B-D-E by the desired amount of time because it is part of both paths. The incremental cost of crashing AB is US \$1,000 ($\$4,000$ crash cost $- \$3,000$ normal cost) to shorten the completion time by 1 day ($4.5 - 3.5$). The alternatives for decreasing both A-B-C-E and A-B-D-E are more costly.

- B.Crashing activity DE saves only 1 day ($7.5 - 6.5$) on the critical path and does not reduce the time needed for A-B-C-E.
- C.Crashing AD does not reduce the time necessary to complete A-B-C-E or A-B-D-E.
- D.AB and CE are not on the critical path.

29.In PERT, slack is the

- A.Uncertainty associated with time estimates.
- B.Difference between the latest starting time and earliest finishing time.
- C.Path that has the largest amount of time associated with it.
- D.Number of days an activity can be delayed without forcing a delay for the entire project.

Answer (D) is correct.

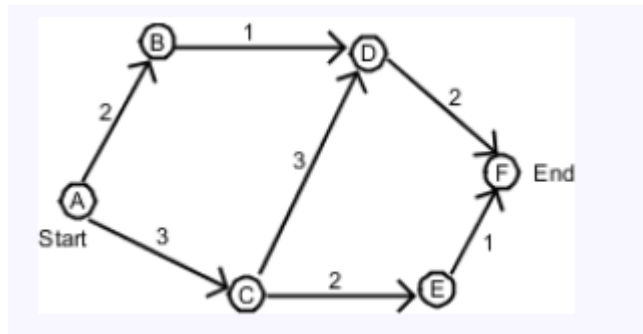
Slack is the amount of time that commencement of an activity can be delayed without forcing a delay of the entire project.

- A.Uncertainty is reflected in the use of probabilistic estimates of completion times.

B.The difference between the latest starting time and earliest finishing time is irrelevant.

C.The path with the largest amount of time associated with it is the critical path.

30. The network below describes the interrelationships of several activities necessary to complete a project. The arrows represent the activities. The numbers between the arrows indicate the number of months to complete each activity.



The shortest time to complete the project is

A.5 months.

B.6 months.

C.8 months.

D.14 months.

Answer (C) is correct.

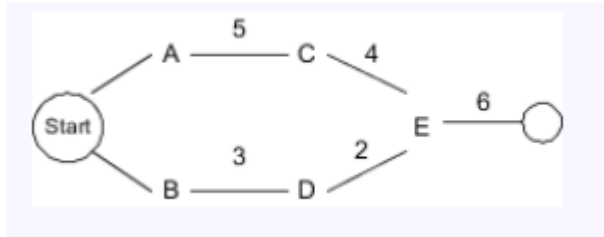
The critical (longest) path through the network from node A to node F is path A-C-D-F. All other paths are shorter than path A-C-D-F, so the activities along those paths can be completed before the activities along path A-C-D-F. Thus, the shortest time to complete the project is 8 months (3 + 3 + 2).

A.The project cannot be completed in less than 8 months.

B.The project cannot be completed in less than 8 months

D.No path through the network requires 14 months

31. The following information and diagram apply to a project:



Activity	Time (days)	Immediate Predecessor
A	5	None
B	3	None
C	4	A
D	2	B
E	6	C, D

The earliest completion time for the project is

- A. 11 days.
- B. 14 days.
- C. 15 days.
- D. 20 days.

Answer (C) is correct.

The two paths through the network are A-C-E ($5 + 4 + 6 = 15$ days) and B-D-E ($3 + 2 + 6 = 11$ days). The critical or longest path is thus A-C-E. Hence, the earliest completion time is 15 days.

- A. The shortest, not the longest, path is 11 days.
- B. Neither of the paths through the network has a time of 14 days.

D.The sum of all of the activity times is 20 days.

32.Which of the following terms is not used in project management?

- A.Dummy activity.
- B.Latest finish.
- C.Optimistic time.
- D.Lumpy demand.

Answer (D) is correct.

Project management applies to managing teams assigned to special projects. Lumpy demand is periodic demand for a product or service that increases in large, lumpy increments.

- A.A dummy activity allows concurrent activities on a PERT/CPM network to end on separate nodes.
- B.The latest finish is the latest that an activity can finish without causing delay in the completion of the project.
- C.Optimistic time is the time for completing a project if all goes well.

33.Activity scheduling information for the installation of a new computer system is given below.

Activity	Immediate Predecessor	Duration (Days)
A	-	4
B	-	3
C	A	9
D	A	6
E	B, D	5

For this project, the critical path is

A.A-C.

B.B-E.

C.A-D-E.

D.B-D-C.

Answer (C) is correct.

The critical path is the longest path because it defines the minimum duration of the project. A-D-E (4 + 6 + 5 = 15 days) is the critical path.

A.The length of path A-C is only 13 days.

B.The length of path B-E is only 8 days.

D.The sequence B-D-C is not a path. The predecessor of C is A.

34.Various tools are employed to control large scale projects. They include all of the following except

A.PERT.

B.CPM.

C.Statistical process control.

D.Gantt charts.

Answer (C) is correct.

Statistical process (quality) control is not used to control large scale projects. Statistical quality control is a method of determining whether the shipment or production run of units lies within acceptable limits. It is also used to determine whether production processes are out of control.

A.PERT breaks down a project into a set of events, arranges the events into a strict priority network, and establishes a completion time for each event.

B.CPM is used to control large scale projects. Essentially a subset of PERT, CPM uses a deterministic rather than a probabilistic estimate of the time required for task completion.

D.Gantt charts compare scheduled production with actual production. Its control function lies in its ability to identify variations and thus formulate corrective actions.

35.A bank is designing an on-the-job training program for its branch managers. The bank would like to design the program so that participants can complete it as quickly as possible. The training program requires that certain activities be completed before others. For example, a participant cannot make credit loan decisions without first having obtained experience in the loan department. An appropriate scheduling technique for this training program is

A.PERT/CPM.

B.Linear programming.

C.Queuing theory.

D.Sensitivity analysis.

Answer (A) is correct.

PERT/CPM is a network method for scheduling interrelated time series activities and identifying any critical paths in the series of activities. The critical path is the longest path through the network.

B.Linear programming is a mathematical technique for maximizing or minimizing a given objective function subject to certain constraints.

C.Queuing theory is used to minimize the costs of waiting lines when items arrive randomly at a service point and are serviced sequentially.

D.Sensitivity analysis is a method for studying the effects of changes in one or more variables on the results of a decision model.

36.When using PERT (Program Evaluation Review Technique), the expected time for an activity when given an optimistic time (a), a pessimistic time (b), and a most likely time (m) is calculated by which one of the following formulas?

A. $(b - a) \div 2$

B. $(a + b) \div 2$

C. $(a + 4m + b) \div 6$

D. $(4abm) \div 6$

Answer (C) is correct.

PERT was developed to aid managers in controlling large, complex projects. PERT analysis includes probabilistic estimates of activity completion times. Three time estimates are made: optimistic, most likely, and pessimistic. The time estimates for an activity are assumed to approximate a beta probability distribution. PERT approximates the mean of the beta distribution by dividing the sum of the optimistic time, the pessimistic time, and four times the most likely time by six.

- A. The most likely time estimate must be included in the formula.
- B. The most likely time estimate must be included in the formula.
- D. Only the most likely time should be weighted by a factor of 4.

37. Program evaluation and review technique (PERT) ordinarily is used for

- A. Large-scale, complex projects.
- B. Large-scale, routine projects.
- C. Small-scale, routine projects.
- D. Small-scale, complex projects.

Answer (A) is correct.

PERT was developed to control large-scale, complex projects. PERT diagrams are free-form networks showing each activity as a line between events. A sequence of lines shows interrelationships among activities.

- B. PERT was developed for complex projects.
- C. PERT was developed for large-scale projects.
- D. PERT was developed for large-scale projects.

38. An organization's management perceives the need to make significant changes. Which of the following factors is management least likely to be able to change?

- A. The organization's members.
- B. The organization's structure.
- C. The organization's environment.

D.The organization's technology.

Answer (C) is correct.

The environment of an organization consists of external forces outside its direct control that may affect its performance. These forces include competitors, suppliers, customers, regulators, climate, culture, politics, technological change, and many other factors. The organization's members are a factor that managers are clearly able to change.

A.The organization's members are a factor that managers are clearly able to change

B.The organization's structure is a factor that managers are clearly able to change.

D.The organization's technology is a factor that managers are clearly able to change.

39.Co-optation is a

A.Method of coping with employee resistance.

B.Cause of resistance to change.

C.Model for categorizing organizational changes.

D.Way of allowing meaningful input by resistant employees.

Answer (A) is correct.

Methods of coping with employee resistance include co-optation through allowing some participation but without meaningful input.

B.Co-optation is a method of coping with employee resistance.

C.Co-optation is a method of coping with employee resistance.

D.Co-optation is a way of allowing some participation but without meaningful input.

**40.Organizational change must be considered in the light of potential employee resistance.
Resistance**

A.May occur even though employees will benefit from the change.

B.Will be greatest when informal groups are weakest.

C. Will be insignificant if no economic loss by employees is expected.

D. Is centered mostly on perceived threats to psychological needs.

Answer (A) is correct.

Resistance to change may be caused by fear of the personal adjustments that may be required. Employees may have a genuine concern about the usefulness of the change, perceive a lack of concern for workers' feelings, fear the outcome, worry about downgrading of job status, and resent deviations from past procedures for implementing change (especially if new procedures are less participative than the old). Social adjustments also may be required that violate the behavioral norms of informal groups or disrupt the social status quo within groups. Economic adjustments may involve potential economic loss or insecurity based on perceived threats to jobs. In general, any perceived deterioration in the work situation that is seen as a threat to economic, social, and/or psychological needs will produce resistance. The various adjustments required are most likely to be resisted when imposed unilaterally by higher authority. However, employees who share in finding solutions to the problems requiring change are less likely to resist because they will have some responsibility for the change.

B. Strong informal groups are likely to offer more resistance.

C. Resistance arises from threats to a complex pattern of economic, social, and psychological needs.

D. Resistance arises from threats to a complex pattern of economic, social, and psychological needs.

41. A major corporation is considering significant organizational changes. Which of the following groups will not be responsible for implementing these changes?

A. Employees.

B. Top management.

C. Common shareholders.

D. Outside consultants.

Answer (C) is correct.

Common shareholders are not responsible for implementing decisions within the organization. If members of the management team also are common shareholders, they must make decisions consistent with their stewardship function. Thus, they must separate their ownership interests from their managerial responsibilities. Organizational change is conducted through change agents, who may include employees, managers, or outside consultants.

A. Organizational change is conducted through change agents, who may include employees.

B. Organizational change is conducted through change agents, who may include managers

D.Organizational change is conducted through change agents, who may include outside consultants. Outsiders can offer an objective, independent view, but they lack knowledge of the organization and do not have to cope with the effects of the changes.

42.An organization is changing to a quality assurance program that incorporates a mindset of “quality throughout the process.” This is very different from its years of dependence on quality control at the end of the process. This type of change is a

- A.Cultural change.
- B.Product change.
- C.Structural change.
- D.Organizational change.

Answer (A) is correct.

A cultural change involves a change in attitudes and mindset.

B.Product change is change in a product’s physical attributes and usefulness to customers.

C.No change to systems and structures is mentioned.

D.No organizational change occurred. The change involves only quality assurance.

43.Lack of skills, threats to job status or security, and fear of failure all have been identified as reasons that employees often

- A.Want to change the culture of their organization.
- B.Are dissatisfied with the structure of their organization.
- C.Are unable to perform their jobs.
- D.Resist organizational change.

Answer (D) is correct.

Employees resist change for many reasons, for example, (1) surprise, (2) inertia, (3) misunderstanding, (4) lack of skills, (5) emotional reactions, (6) lack of trust of management, (7) fear of failure, (8) personality conflicts, (9) poor timing, (10) management’s insensitivity, (11) threats to job status or security, and (12) breakup of the work group. Resistance may be overcome by involving employees to gain feedback and allay fears.

A.Lack of skills, threats to job status or security, and fear of failure inhibit changes in the culture of the organization.

B.Lack of skills, threats to job status or security, and fear of failure are not symptoms of dissatisfaction with the structure of the organization.

C.Lack of skills, threats to job status or security, and fear of failure do not indicate an inability to perform.

44.Of the following reasons for employees to resist a major change in organizational processes, which is least likely?

A.Threat of loss of jobs.

B.Required attendance at training classes.

C.Breakup of existing work groups.

D.Imposition of new processes by senior management without prior discussion.

Answer (B) is correct.

Change management is important to all organizations. An appropriate balance between change and stability is necessary if an organization is to thrive. Employee training programs educate employees to perform jobs in a new or different way. Thus, they are a means of coping with employee resistance to change through facilitation and support of the change.

A.Actual or imagined loss of jobs is a common reason for employees to resist any change.

C.Members of work groups often exert peer pressure on one another to resist change, especially if social relationships are changed.

D.Imposing change without prior discussion of the need for change threatens the status quo, which fosters employee resistance.

45.Employee resistance to change may be caused

A.Only by simple surprise or by inertia.

B.By manipulation of information or events.

C.By bad timing.

D.By coercion.

Answer (C) is correct.

Resistance may be caused by simple surprise or by inertia, but it also may result from (1) misunderstandings or lack of the needed skills; (2) lack of trust of, or conflicts with, management; (3) emotional reactions when change is forced; (4) bad timing; (5) insensitivity to employees' needs; (6) perceived threats to employees' status or job security; (7) dissolution of tightly knit work groups; and (8) interference with achievement of other objectives.

A. Simple surprise and inertia are not the only possible causes of resistance.

B. Manipulation of information or events is a method of coping with employee resistance to change.

D. Coercion is a method of coping with employee resistance.

46. An internal auditor is conducting an operational review that affects several different functional units. The auditor believes that the process under review can be improved, but the operating managers are resistant to suggestions for change. There are several methods the auditor could use to overcome the operating managers' resistance. Identify the technique that will produce the highest probability of success with the fewest negative side effects.

A. Negotiation with the operating managers.

B. Participation by the managers in the decision process.

C. Coercion of the managers through threats.

D. Cooperation by approaching each manager individually.

Answer (B) is correct.

Participation by the operating managers in the decision process can improve the overall decision, reduce resistance, and secure their commitment to the change.

A. Negotiation may result in sacrifice by one or both parties. Also, if significant concessions are made to one manager, the others will try to gain a similar advantage.

C. Coercion is a temporary solution. Resistance will only be subdued, not eliminated. In addition, future cooperation between the auditor and operating managers will be severely restricted.

D. Cooperation of individual managers is not optimal. A manager approached to obtain his or her endorsement may feel that (s)he is being used.

47. A chief audit executive plans to make changes that may be perceived negatively by the audit staff. The best way to reduce resistance would be to

- A. Develop the new approach fully before presenting it to the audit staff.
- B. Ask the chief executive officer (CEO) to approve the changes and have the CEO attend the departmental staff meeting when they are presented.
- C. Approach the staff with the general idea and involve them in the development of the changes.
- D. Get the internal audit activity's clients to support the changes.

Answer (C) is correct.

Change management is important to all organizations. An appropriate balance between change and stability is necessary. Organizational and procedural changes often are resisted by the individuals and groups affected. Involving the staff in the change from the beginning will reduce their resistance to change.

- A. Fully developing the plan before presenting it to the audit staff will not help reduce their resistance to change.
- B. Involving the CEO will not necessarily reduce the audit staff's resistance to change.
- D. Involving the internal audit activity's clients will not necessarily reduce the audit staff's resistance to change.

48. Organizational development (OD) is one of the major approaches to proactive management of change in organizations. One of the major objectives of OD is to

- A. Increase the power of leaders.
- B. Align the organization's and the employees' goals.
- C. Attract better employees to the organization.
- D. Provide the organization and its managers with ways to increase efficiency.

Answer (B) is correct.

The objectives of OD are to (1) deepen the sense of organizational purpose and align individuals with it; (2) promote interpersonal trust, communication, cooperation, and support; (3) encourage a problem-solving approach; (4) develop a satisfying work experience; (5) supplement formal authority with authority based on expertise; (6) increase personal responsibility; and (7) encourage willingness to change.

- A. OD focuses on participation and power sharing.

- C. Attracting better applicants to an organization is not a major goal of OD.
- D. OD provides an organization and its managers with higher effectiveness.

49. An organization has embarked on a program of process innovation and core process redesign. To counter resistance, it has adopted an organizational development (OD) approach that includes

- A. Inducing employees to share organizational purposes and values.
- B. Incremental change of subsystems.
- C. Focusing each division's attention on its own objectives.
- D. Manipulating information and events.

Answer (A) is correct.

The objectives of OD are to (1) deepen the sense of organizational purpose and values and align individuals with them; (2) promote interpersonal trust, communication, cooperation, and support; (3) encourage a problem-solving approach; (4) develop a satisfying work experience; (5) supplement formal authority with authority based on expertise; (6) increase personal responsibility; and (7) encourage willingness to change.

- B. The intended change is an instance of business process reengineering. It is thus a strategic, not an incremental, change.
- C. The organization should not promote the silo approach. Rather, it should promote adherence to the organization's culture, values, and objectives.
- D. Manipulation, co-optation, and coercion tend to be ineffective means of change management.

50. Internal auditors can be considered leading agents for change within an organization. Which of the following is not a good way to promote this concept?

- A. A directive from top management stating that internal auditors will be used for all process-improvement projects.
- B. A brochure describing what internal auditing can do and the qualifications of the internal auditors.
- C. Post-engagement questionnaires to obtain information on how engagement clients perceive the internal audit activity.
- D. Bulletins that highlight widespread or universal applications of engagement observations.

Answer (A) is correct.

A directive does not promote, but requires, the use of internal auditors. The result may be resentment towards the internal auditors and resistance to beneficial change. Education, communication, participation in decisions by those affected, facilitation and support, and negotiation are means of overcoming resistance to change.

B. Brochures are an effective way to promote internal auditors as leading agents for change within an organization. They are an educational and communication tool.

C. Questionnaires provide a means of engagement client participation in change.

D. Bulletins are an effective way to promote internal auditors as leading agents for change within an organization. They are an educational and communication tool.

51. A corporation that is reorganizing its governance and operating structure has adopted an organizational development (OD) program. This program

A. Should result in actual improvements.

B. Promotes clearer lines of authority and tighter discipline.

C. Emphasizes attention to each subunit's goals.

D. Relies on advanced performance metrics to improve efficiency.

Answer (A) is correct.

A distinct characteristic of OD is that the change must actually improve the organization. Changes forced by regulatory requirements or changes that merely attempt to follow management trends and fads are not included.

B. OD supplements formal authority with authority based on expertise. It also focuses on participation and power sharing.

C. OD emphasizes adherence to the organization's goals, values, and culture.

D. OD is intended to improve effectiveness using the findings of the behavioral sciences.

52. Organizational development (OD) is a structured process for assisting adaptation to environmental change. An objective of OD is to

- A. Apply co-optation methods to overcome employee resistance.
- B. Establish procedures and policies that result in consistent organizational behavior.
- C. Dissolve tightly bonded work groups.
- D. Encourage a problem-solving approach.

Answer (D) is correct.

The objectives of OD are to (1) deepen the sense of organizational purpose and align individuals with it; (2) promote interpersonal trust, communication, cooperation, and support; (3) encourage a problem-solving approach; (4) develop a satisfying work experience; (5) supplement formal authority with authority based on expertise; (6) increase personal responsibility; and (7) encourage willingness to change.

- A. OD promotes interpersonal trust, communication, cooperation, and support.
- B. A bureaucratic organization attempts to establish procedures and policies that result in consistent organizational behavior.
- C. Dissolving tightly bonded work groups is a reason for employee resistance to change.

53. Education, communication, and participation of employees most likely are reasons that they

- A. Form tightly bonded work groups.
- B. Have high levels of expertise.
- C. Accept organizational change.
- D. Understand organizational change as a threat to their status.

Answer (C) is correct.

Employees resist change for many reasons, for example, (1) surprise, (2) inertia, (3) misunderstanding, (4) lack of skills, (5) emotional reactions, (6) lack of trust of management, (7) fear of failure, (8) personality conflicts, (9) poor timing, (10) management's insensitivity, (11) threats to job status or security, and (12) breakup of the work group. Resistance may be overcome by involving employees to gain feedback and allay fears.

- A. Dissolution of tightly bonded work groups is a reason for resistance to change.
- B. Education about, communication of, and participation in organizational change are ways of overcoming employees' resistance. They are not means of enhancing their expertise.
- D. Education and communication are methods of coping with employee resistance to change. Participation in designing and implementing change also is a means of coping with resistance.

54. The most likely reason for employee resistance to organizational change is

- A. Mandatory counseling about the change.
- B. Lack of needed skills.
- C. Negotiation with management.
- D. Increased personal responsibility.

Answer (B) is correct.

Employees resist change for many reasons, for example, (1) surprise, (2) inertia, (3) misunderstanding, (4) lack of skills, (5) emotional reactions, (6) lack of trust in management, (7) fear of failure, (8) personality conflicts, (9) poor timing, (10) management's insensitivity, (11) threats to job status or security, and (12) breakup of the work group.

- A. Facilitation and support through training and counseling are means of coping with resistance to change.
- C. Negotiation with management by providing a benefit in exchange for cooperation is a means of coping with resistance to change.
- D. Increased personal responsibility is a goal of organizational development (OD).

55. Which of the following is not a required element of a contract?

- A. Legality.
- B. Consideration.
- C. Legal capacity.
- D. A writing.

Answer (D) is correct.

The four essential elements of a contract are an agreement (offer and acceptance), consideration, legal capacity of the parties to contract, and a legal objective or purpose. A writing is not required to enter into a contract. However, some contracts are not enforceable unless a writing evidences the contract.

- A. Legality is a required element of a contract.
- B. Consideration is a required element of a contract.
- C. Legal capacity is a required element of a contract.

56. Lamar became homeless at a very young age and was taken in by Aunt and Uncle. Many years later, Lamar became a detective in the city police department. When Aunt disappeared and was not heard from for a month, the case was assigned to Lamar. Uncle also came to Lamar and asked him to promise to find Aunt in return for the years of support. Lamar agreed to Uncle's request. Which of the following is true?

- A. Lamar's contractual duty to find Aunt is based on past consideration.
- B. Lamar has no contractual duty to find Aunt.
- C. If Uncle had also promised Lamar US \$1,000 for finding Aunt, he would be liable when Lamar found her.
- D. Lamar will be liable for breach of contract if he does not find Aunt.

Answer (B) is correct.

Lamar has a pre-existing legal duty to find Aunt. Consideration does not exist if an existing duty was imposed by law or a person is already under a contractual agreement to render a specified performance. Lamar will suffer no new legal detriment by promising to find Aunt. Thus, no contractual obligation exists.

- A. Past consideration does not satisfy the consideration requirement for the formation of a contract.
- C. Lamar has a pre-existing legal duty to find Aunt.
- D. Lamar has not made a valid contract with Uncle.

57. The necessary elements of a contract include

- A. Some form of writing, equal consideration, and legal capacity.

- B. Formal execution, definite terms, and a valid offer and acceptance.
- C. Offer and acceptance, consideration, legal capacity, and mutual assent.
- D. Bilateral promises, legal capacity, and legality of purpose.

Answer (C) is correct.

Contracts require each of the following:

1. Offer and acceptance
2. Mutual assent (offer and acceptance)
3. Consideration (bargained-for exchange)
4. Legality (legal purpose)
5. Capacity of parties (legal ability)

A. An oral contract is usually enforceable. Consideration must be legally sufficient and must be bargained for but need not have equal market value.

B. Most contracts are informal (simple), and if a term is missing, it can be implied by the court, with the exception of a quantity term.

D. Promises can be unilateral or divisible.

58. Consideration consists of

- A. Something with monetary value.
- B. Each party's receiving an actual benefit only.
- C. Two promises.
- D. Legal sufficiency and bargained-for exchange.

Answer (D) is correct.

Consideration must be legally sufficient and intended as a bargained-for exchange. A promisee has provided legally sufficient consideration if (s)he incurs a legal detriment or if the promisor receives a legal benefit. An essential aspect of consideration is that it be bargained for, and given in exchange for, the consideration provided by the other party. That is, consideration is mutual.

A. Monetary value is relatively unimportant. For example, a mere promise satisfies the element of legal sufficiency.

B.Consideration is an exchange of legal benefit that may not have actual benefit.

C.Contracts can be unilateral, which involves only one promise.

59.Which of the following creates a valid contract between the parties?

A.A reward was posted for the capture of Tom Jones. Maypole Burden, the county sheriff, captured Jones and claimed the reward.

B.Slim Polestone promised to give Mabel Abbot a wedding present.

C.Anxious Father promised to pay Albert Niceguy US \$4,000 to take his daughter to the annual Mulestone Dance. Albert agreed.

D.Festival Fanny was drowning in her hot tub. Her boyfriend pulled her out. After the rescue, Festival's husband promised to pay her boyfriend US \$4 for rescuing his wife.

Answer (C) is correct.

A valid contract exists because Anxious Father offered to pay Albert US \$4,000 for taking his daughter to the dance. This is a unilateral contract supported by the consideration of US \$4,000. Albert will be entitled to the US \$4,000 after he takes the daughter to the dance.

A.The sheriff had a pre-existing legal duty to capture the criminal.

B.A promise to make a gift is not enforceable. It lacks the bargain element.

D.Past consideration is not consideration.

60.Which type of contract should be used if there is adequate competition, performance uncertainties can be identified, and reasonable estimates of the cost can be made?

A.Cost-plus-fixed-fee contract.

B.Cost-plus-award-fee contract.

C.Time-and-materials contract.

D.Firm-fixed-price contract.

Answer (D) is correct.

A firm-fixed-price contract has a price that cannot be changed even if costs increase unexpectedly. It should be used when (1) price competition is adequate, (2) reasonable price comparisons and estimates of costs can be made, and (3) performance uncertainties can be identified.

A. A cost-plus-fixed fee contract provides for cost reimbursements. It should be used when a firm-fixed-price contract is unsuitable, such as when costs cannot be reasonably estimated because of performance uncertainties.

B. A cost-plus-award-fee contract provides for award in addition to incurred costs. It should be used when it is (1) impracticable to set predetermined incentive targets, (2) the performing party will be motivated toward exceptional performance, and (3) the expected benefits will exceed the costs required to monitor and evaluate performance.

C. A time-and-materials contract provides for acquiring supplies or services based on (1) direct labor hours at a specified rate and (2) actual cost of materials. It should be used only when it is not possible to accurately estimate the extent or duration of work or to reasonably estimate costs.

61. Carol dictated an offer she intended to make to Deanna. Irvin, her secretary, drafted an email based on Carol's dictation. During lunch and before the offer had been sent, Irvin saw Deanna and told her about it. Deanna promptly sent an acceptance to Carol. What was the effect of this attempted acceptance?

A. No contract was formed because the offer was not communicated to the offeree.

B. No contract was formed because the offer was not communicated to the offeree by the means chosen by the offeror.

C. A contract was formed because Irvin was Carol's agent.

D. A contract was formed because Carol intended to make an offer and Deanna learned of the offer in time to make a valid acceptance.

Answer (B) is correct.

An offer is not effective until it is communicated to the offeree. The communication, however, must be by a means chosen by the offeror. Carol evidently intended to communicate the offer by email. When the offeree learned of the offer in an unauthorized manner, she could only make an offer, not a valid acceptance.

A. The offer was actually communicated but not as intended by the offeror.

C. The facts do not indicate that Irvin was an agent for purposes of communicating offers.

D. The offer must be communicated as intended by the offeror.

62. Gudrun owned a 2,000-acre country estate. She signed a written agreement with Johann, selling the house on the property and "a sufficient amount of land surrounding the house to create a park." The price was stated to be US \$200,000. When Gudrun refused to honor the agreement, Johann sued. Who will prevail and why?

- A.Gudrun will win because the agreement is not reasonably definite.
- B.Johann will win because the quantity of land is implied.
- C.Johann will win because the parties intended to make a contract.
- D.Gudrun will win because no financing term was included in the agreement.

Answer (A) is correct.

For an agreement between the parties to be enforceable, it must be reasonably definite and certain (not ambiguous). A court must be able to determine with reasonable accuracy what the parties agreed upon. In this case, the writing is not reasonably clear as to what amount of land Gudrun agreed to sell.

- B.Some objective basis must exist for measuring the implied term. The court has no means of determining how much land is needed for a park.
- C.A court must be able to determine with reasonable accuracy what the parties agreed upon.
- D.The quantity term is more significant than the financing term. The price is given and payment in cash (or its equivalent) is implied.

63.Egan, a minor, purchased Baker's used computer for Egan's personal use. Egan paid US \$200 down on delivery and was to pay US \$200 thirty days later. Twenty days later, the computer was damaged seriously as a result of Egan's negligence. Five days after the damage occurred and 1 day after Egan reached the age of majority, Egan attempted to disaffirm the contract with Baker. Egan will

- A.Be able to disaffirm even though Egan was not a minor at the time of disaffirmance.
- B.Be able to disaffirm only if Egan does so in writing.
- C.Not be able to disaffirm because Egan had failed to pay the balance of the purchase price.
- D.Not be able to disaffirm because the computer was damaged as a result of Egan's negligence.

Answer (A) is correct.

Most contracts entered into by a minor may be disaffirmed if (s)he acts during minority or a short time thereafter. Tender of goods is usually required. However, a minor may disaffirm even though (s)he cannot return the property or can return it only in damaged condition.

B. A writing was not required to disaffirm the voidable contract. Note that a minor's power to disaffirm is not dependent on the UCC.

C. Payment of the balance would be performance, which is not a condition of disaffirming.

D. Egan may still disaffirm the contract but may be liable for negligence in tort.

64. In determining whether the consideration requirement to form a contract has been satisfied, the consideration exchanged by the parties to the contract must be

A. Of approximately equal value.

B. Legally sufficient.

C. Exchanged simultaneously by the parties.

D. Fair and reasonable under the circumstances.

Answer (B) is correct.

Consideration must be legally sufficient and intended as a bargained-for exchange. A promisee has provided legally sufficient consideration if (s)he incurs a legal detriment or if the promisor receives a legal benefit.

A. Legally sufficient consideration exchanged may be disparate in value.

C. As long as a genuine bargained-for exchange is intended, the consideration need not be simultaneously exchanged.

D. The amount of consideration is set in the market, not the courts. But extreme disparity of value may evidence fraud, unconscionability, a gift, etc.

65. The estate of Buck Sonn was liquidated at auction. Among the items sold was an old safe purchased for a small sum by Ann Little. Both the auctioneer and Little were aware that the safe had a locked inner compartment. When the compartment was opened, a large sum of money was found. The Sonn estate sued to recover the money. The estate should

A. Win because the parties did not intend to contract regarding the money.

B. Lose because the parties objectively manifested an intent to contract regarding the safe and its contents.

C. Win because of a mutual mistake.

D. Lose because it had a subjective intent to sell the safe.

Answer (B) is correct.

To have legal effect, an agreement must objectively manifest an intent to enter into a contract. Whether an offer has been made is determined by an objective standard. Subjective intent is not important. If the contracting parties are mutually mistaken about the same fact, the resulting contract can be avoided for lack of objective intent if the following elements exist: (1) The mistake relates to a basic assumption on which the contract was made; (2) the mistake has a material effect on the agreed contract; and (3) the party adversely affected by the mistake does not bear the risk of the mistake. The estate may not rescind because choosing to contract to sell the safe without opening the locked compartment indicates an objective intent to sell any contents that may be enclosed with conscious awareness that the true facts about the contents are unknown to the estate's representative.

A.The objective intent to contract for the safe and its contents existed.

C.The objective intent to contract for the contents existed.

D.An objective intent to contract existed.

66.The objective manifestation rule is used to argue the enforceability of a promise that

A.Is not supported by consideration.

B.Requires the performance of an illegal act.

C.Is made by a person who lacks contractual capacity.

D.May be interpreted as a serious proposal.

Answer (D) is correct.

To have legal effect, an offer must manifest an intent to enter into a contract. Whether an offer has been made is determined by an objective standard. The test is whether a reasonable person would assume that the power of acceptance had been conferred. Subjective intent is not important.

A.Consideration is something of value given in a bargained-for exchange, when the parties intend an exchange.

B.It is not an element of the objective manifestation rule.

C.Lack of contractual capacity is not an element of the objective manifestation rule.

67.When a client accepts the services of an accountant without an agreement concerning payment, the result is

- A. An implied-in-fact contract.
- B. An implied-in-law contract.
- C. An express contract.
- D. No contract.

Answer (A) is correct.

Enforceable contracts may be formed without an express agreement of terms if the facts of the situation indicate (imply) an objective intent of both parties to contract. Objective intent means the apparent intent of an ordinary, reasonable person and not the actual (subjective) intent. When a client accepts the services of an accountant, an agreement to pay for them is implied. Because the facts indicate a contract was formed, it is an implied-in-fact contract.

- B. The equitable remedy of restitution or quasi-contract (contract implied in law) prevents unjust enrichment of one party when the facts do not indicate both parties intended to form a contract.
- C. An express contract is one in which the terms (such as payment) are specifically agreed upon.
- D. A contract implied in fact was formed.

68. Which of the following represents the basic distinction between a bilateral contract and a unilateral contract?

- A. Specific performance is available if the contract is unilateral but not if it is bilateral.
- B. Only one promise is involved if the contract is unilateral, but two are involved if it is bilateral.
- C. The statute of frauds applies to a bilateral contract but not to a unilateral contract.
- D. Rights under a bilateral contract are assignable, whereas rights under a unilateral contract are not assignable.

Answer (B) is correct.

In a bilateral contract, the promise of one party to perform is consideration for the promise of the other. In a unilateral contract, one party makes a promise in exchange for the other party's act, instead of in exchange for a promise from the other party (as in a bilateral contract). Thus, a unilateral contract involves only one promise, but a bilateral contract involves two promises.

- A. The availability of specific performance is not affected by the distinction between unilateral and bilateral contracts. They may apply to either a unilateral or bilateral contract.

C.The applicability of the statute of frauds is not affected by the distinction between unilateral and bilateral contracts. They may apply to either a unilateral or bilateral contract.

D.The assignability of rights is not affected by the distinction between unilateral and bilateral contracts. They may apply to either a unilateral or bilateral contract.

69.On the first day of the month, Thomas and Moore orally agreed that Thomas was to deliver to Moore’s place of business a case of fruit on each Monday of the current month. Moore was to pay the US \$100 price on the first of the following month. On the 15th of the month, the agreement should be classified as

A.Executed.

B.Executory.

C.Unexecuted because the agreement was oral.

D.Cancelable at any time.

Answer (B) is correct.

An executed contract is one in which the parties have completed their performance. A contract is executory to the extent it has not been fully performed. As of the 15th, Thomas had partially performed, but Moore had not performed at all. The contract was therefore executory.

A.Both parties had not completed performance.

C.“Executory” and “executed” refer to the performance of the contract, not to its form. Although “executed” in ordinary usage may mean signed, an oral contract can never be executed in this sense.

D.The entire contract is enforceable. No provisions allow for it to be canceled.

70.Certain contracts have absolutely no effect and are not recognized under law. If two or more parties enter into such an agreement, it is

A.Valid.

B.Void.

C.Voidable.

D.Unenforceable.

Answer (B) is correct.

Contracts that are of no effect and not recognized under law are void. Neither party has a legal obligation to the other based on the contract. The parties may go through with their performance, but the law provides no remedy for a breach.

A. Remedies are available if a valid contract is breached.

C. A voidable contract is valid but enforceable by only one party. For example, a contract entered into by fraud may be enforced by the innocent party but not by the fraudulent party.

D. An unenforceable contract has been validly formed but cannot be enforced because of a flaw.

71. Ina Turner owned a parcel of real property that she wished to sell. She signed a written agreement with Ali Bike, a real estate broker, stating that, if he found a purchaser willing and able to pay a stated price, she would pay Bike a commission. Bike located a buyer who signed a written offer to purchase and tendered a down payment. When Turner refused the offer, Bike brought suit to obtain his commission. Which of the following is true?

A. The buyer has a cause of action against Turner.

B. Bike has a cause of action against Turner on a unilateral contract.

C. Bike has a cause of action against Turner on a bilateral contract.

D. No contract was formed.

Answer (B) is correct.

A unilateral contract is one in which only one party makes a promise. The promisor expects the promisee to accept the offer by performance, not by making a return promise. The promisor in this contract is Turner, and the promisee is Bike. The promise was that Turner would pay Bike a commission if Bike located a buyer for Turner's property.

A. The buyer does not have a contract with Turner since Turner refused the buyer's offer.

C. A bilateral contract is one in which both parties make promises.

D. A unilateral offer and acceptance occurred.

72. A contract contains several promises made by each of the parties, and performance of every promise has not yet been performed. This contract is

A. Executed.

- B.Executory.
- C.Voidable.
- D.Forma

Answer (B) is correct.

A contract is executory if any duty remains to be performed.

A.An executed contract has been fully performed by all parties.

C.A voidable contract is one that a party may either enforce or avoid without being in breach of contract.

D.A formal contract is given special effect under the law because its form requires a particular set of formalities or special language.

73.Party X and Party Z are negotiating an agreement. Believing that a contract has been formed, X transfers property to Z. However, Z does not manifest an intent to form a contract despite accepting the property. On what legal theory may X recover the property?

- A.Executed contract.
- B.Unilateral contract.
- C.Implied-in-law contract.
- D.Implied-in-fact contract.

Answer (C) is correct.

An implied-in-law contract (restitution or quasi-contract) may be asserted to prevent unjust enrichment when both parties did not intend to form a contract

A.An executed contract has been fully performed by all parties.

B.In a unilateral contract, only one party makes a promise. The other party is an actor, not a promisor. If (s)he performs a defined action (an acceptance), the promisor is obligated to keep the promise.

D.A contract is implied in fact when the facts indicate a contract was formed.

74.Under the common law of contracts,

- A. A contract cannot be formed unless each party makes a promise.
- B. An agreement is enforceable if one party performs an action specified by a second party as a condition for fulfilling a promise.
- C. A contract is always enforceable if it has all the elements of a contract.
- D. Terms of a contract must be stated explicitly either orally or in writing.

Answer (B) is correct.

In a unilateral contract, only one party makes a promise. The other party is an actor, not a promisor. If (s)he performs a defined action (an acceptance), the promisor is obligated to keep the promise.

- A. A contract may be unilateral.
- C. An unenforceable contract is a valid contract because it has all the elements of a contract. But the law will not enforce the contract because it does not comply with another legal requirement.
- D. The terms of an implied contract are wholly or partially inferred from conduct and circumstances but not from written or spoken words.

75. One party was fraudulently induced by a second party to enter into a contract. The agreement

- A. May be recognized by the law.
- B. Is void ab initio.
- C. Is valid but unenforceable.
- D. Is valid if executory.

Answer (A) is correct.

The contract is voidable, not void. The innocent party may choose to enforce the contract. The fraudulent party may not.

- B. A void contract is not binding and is considered void ab initio. It is void at its inception and cannot be ratified and enforced.
- C. The contract may be enforced only by the innocent party.
- D. An executory contract is a contract that is not yet fully performed. If any duty remains to be performed under the contract, the contract is considered executory. But the contract is not valid. It is not binding on both parties.

76. Gameco is a corporation formed to provide sports betting services to the public. For this purpose, it enters into employment contracts with various individuals. But the state where Gameco plans to operate does not permit sports betting services. Accordingly, these contracts are

- A. Voidable.
- B. Unilateral.
- C. Valid but unenforceable.
- D. Void.

Answer (D) is correct.

A void contract is not binding and is considered void ab initio. It is void at its inception and cannot be ratified and enforced. The sports betting agreements are void. They do not meet the legality requirement for a valid contract.

A. A party may choose either to enforce or nullify a voidable contract.

B. In a unilateral contract, only one party makes a promise. The other party is an actor, not a promisor. If (s)he performs a defined action (an acceptance), the promisor is obligated to keep the promise.

C. A valid contract has all the elements of a contract, and the law provides a remedy if breached. A valid contract is legally binding on both parties. An unenforceable contract is a valid contract because it has all the elements of a contract. But the law will not enforce the contract because it does not comply with another legal requirement.

PART 3 UNIT 5

Question: 1 Of the following, the greatest advantage of a database (server) architecture is

- A. Data redundancy can be reduced.
- B. Conversion to a database system is inexpensive and can be accomplished quickly.
- C. Multiple occurrences of data items are useful for consistency checking.
- D. Backup and recovery procedures are minimized.

Answer (A) is correct.

In a database system, storage structures are created that render the applications programs independent of the physical or logical arrangement of the data. Because separate files for different applications programs are unnecessary, data redundancy can be substantially reduced.

- B . Conversion to a database is often costly and time consuming.
- C . A traditional flat-file system, not a database, has multiple occurrences of data items.
- D . Given the absence of data redundancy and the quick propagation of data errors throughout applications, backup and recovery procedures are just as critical in a database as in a flat-file system.

Question: 2 An inventory clerk, using a computer terminal, views the following on screen: part number, part description, quantity on hand, quantity on order, order quantity, and reorder point for a particular inventory item. Collectively, these data make up a

- A. Field.
- B. File.
- C. Database.
- D. Record.

Answer (D) is correct.

A record is a collection of related data items (fields). A field (data item) is a group of characters representing one unit of information. The part number, part description, etc., are represented by fields.

- A . Field refers to a single data item.B.File.C.Database.D.Record.
- B . File refers to multiple records.
- C . Database refers to multiple files.

Question: 3 Which of the following is the elementary unit of data storage used to represent individual attributes of an entity?

- A. Database.
- B. Data field.
- C. File.
- D. Record.

Answer (B) is correct.

A data item (or field) is a group of characters. It is used to represent individual attributes of an entity, such as an employee's address. A field is an item in a record.

- A . A database is an organized collection of files.
- C . A file is a collection of records.
- D . A record is a collection of data items.

Question: 4 A file-oriented approach to data storage requires a primary record key for each file. Which of the following is a primary record key?

- A. The vendor number in an accounts payable master file.
- B. The vendor number in a closed purchase order transaction file.
- C. The vendor number in an open purchase order master file.
- D. All of the answers are correct.

Answer (A) is correct.

The primary record key uniquely identifies each record in a file. Because there is only one record for each vendor in an accounts payable master file, the vendor number would be the appropriate key.

- B . Purchase order files can have multiple purchase orders made out to the same vendor. The primary key in purchase order files would be the purchase order number because it is the only unique identifier for the record.
- C . Purchase order files can have multiple purchase orders made out to the same vendor. The primary key in purchase order files would be the purchase order number because it is the only unique identifier for the record.
- D . Not all of the answer choices are correct.

Question: 5 Auditors making database queries often need to combine several tables to get the information they want. One approach to combining tables is known as

- A. Extraction.
- B. Joining.
- C. Sorting.
- D. Summarization.

Answer (B) is correct.

In data management terminology, joining is the combining of data files based on a common data element. For example, if rows in a table containing information about specified parts have been selected, the result can be joined with a table that contains information about suppliers. The join operation may combine the two tables using the supplier number (assuming both tables contained this element) to provide information about the suppliers of particular parts.

- A . Extraction selects data containing specified criteria from a data file; it does not combine tables.
- C . Sorting allows the auditor to organize data by any data field, not combine tables.
- D . Summarization reports on the information contained in several tables but does not combine the tables.

Question: 6 In a database system, locking of data helps preserve data integrity by permitting transactions to have control of all the data needed to complete the transactions. However, implementing a locking procedure could lead to

- A. Inconsistent processing.
- B. Rollback failures.
- C. Unrecoverable transactions.
- D. Deadly embraces (retrieval contention).

Answer (D) is correct.

In a distributed processing system, the data and resources a transaction may update or use should be held in their current status until the transaction is complete. A deadly embrace occurs when two transactions need the same resource at the same time.

- A . Inconsistent processing occurs when a transaction has different effects depending on when it is processed. Data locking ensures consistent processing.

B . Rollback failure is the inability of the software to undo the effects of a transaction that could not be run to completion. A rollback failure is not caused by data locking. However, data locking may lead to situations in which rollback is required.

C . Unrecoverable transactions are not a typical symptom of locking procedures.

Question: 7 One advantage of a database management system (DBMS) is

- A. That each organizational unit takes responsibility and control for its own data.
- B. That the cost of the data processing department decreases as users are now responsible for establishing their own data handling techniques.
- C. A decreased vulnerability as the database management system has numerous security controls to prevent disasters.
- D. The independence of the data from the application programs, which allows the programs to be developed for the user's specific needs without concern for data capture problems.

Answer (D) is correct.

A fundamental characteristic of databases is that applications are independent of the database structure; when writing programs or designing applications to use the database, only the name of the desired item is necessary. Programs can be developed for the user's specific needs without concern for data capture problems.

A . Each organizational unit develops programs to make use of elements of a broad database.

B . Data handling techniques are still the responsibility of the data processing department; it is the use of the data that is departmentalized.

C . The DBMS is no safer than any other database system.

Question: 8 Which of the following should not be the responsibility of a database administrator?

- A. Design the content and organization of the database.
- B. Develop applications to access the database.
- C. Protect the database and its software.
- D. Monitor and improve the efficiency of the database.

Answer (B) is correct.

The database administrator (DBA) is the person who has overall responsibility for developing and maintaining the database. One primary responsibility is designing the content of the database. Another responsibility of the DBA is to protect and control the database. A third responsibility is to monitor and

improve the efficiency of the database. The responsibility of developing applications to access the database belongs to systems analysts and programmers.

A . Designing the content and organization of the database is a responsibility of the database administrator.

c . Protecting the database and its software is a responsibility of the database administrator.

D . Monitoring and improving the efficiency of the database is a responsibility of the database administrator.

Question: 9 To trace data through several application programs, an auditor needs to know what programs use the data, which files contain the data, and which printed reports display the data. If data exist only in a database system, the auditor could probably find all of this information in a

A. Data dictionary.

B. Database schema.

C. Data encryptor.

D. Decision table.

Answer (A) is correct.

The data dictionary is a file of all data items contained in the database and their length, usage, and ownership. Only certain persons or entities are permitted to retrieve data or to modify data items.

B . The schema describes the structure of the database.

C . An encryptor encodes data.

D . A decision table is a type of logic diagram that presents in matrix form the decision points and related actions reflected in a computer program.

Question: 10 What language interface would a database administrator use to establish the structure of database tables?

A. Data definition language.

B. Data control language.

C. Data manipulation language.

D. Data query language.

Answer (A) is correct.

The schema is a description of the overall logical structure of the database using data-definition language (DDL), which is the connection between the logical and physical structure of the database. DDL is used to define, or determine, the database.

- B . Data control language (DCL) is used to specify privileges and security rules.
- C . Data manipulation language (DML) provides programmers with a facility to update the database.
- D . Data query language (DQL) is used for ad hoc queries.

Question: 11 Query facilities for a database system would most likely include all of the following except

- A. Graphical output capability.
- B. Data dictionary access.
- C. A data validity checker.
- D. A query-by-example interface.

Answer (C) is correct.

The least likely feature of a query tool would be a data validity checker because the database system has already enforced any validity constraints at the time the data were inserted in the database. Any further data validity checking would be a function of a user application program rather than a query.

- A . Most query tools include the capability of presenting the results of queries graphically.
- B . Query tools include data dictionary access because that is how they know what table attributes to present to users.
- D . Query tools typically have query-by-example interface.

Question: 12 An internal auditor encounters a batch-processed payroll in which each record contains the same type of data elements, in the same order, with each data element needing the same number of storage spaces. Which file structure most appropriately supports this set of records?

- A. Single flat file structure.
- B. Hierarchical structure.
- C. Network structure.
- D. Relational structure.

Answer (A) is correct.

In a single flat file structure, all attributes and field lengths in a record are identical to those in the other records. The structure is typically a table or spreadsheet with records for rows and attributes for columns.

B . A hierarchical or tree structure is used to express relationships in which one attribute or item is related to many others in layers of subordinate records.

C . A network structure expresses complex relationships in which many attributes are related to many others.

D . A relational structure is not unlike the flat structure but is far more sophisticated. It gives the system the ability to handle many data relationships that were not anticipated by the designers. It uses a series of tables in which each table defines a relationship.

Question: 13 Which of the following database models is considered to be the most versatile?

- A. The tree model.
- B. The hierarchical model.
- C. The network model.
- D. The relational model.

Answer (D) is correct.

Because data are organized in two-dimensional tables, a relational database is easier to construct than the complex architectures that result when using the hierarchical and network models. The tables (relations) provide flexibility because they can be combined (joined) in many ways to permit a wide variety of inquiries. They also permit data to be more readily added to or omitted from the data structures.

A . The tree model organizes data through the development of relationships that are strictly one to many. Construction of this model is difficult because the data are hard coded. When data are added to the database, the index must be completely redefined. In the relational model, however, new relations can be created by joining tables.

B . The hierarchical model organizes data through the development of relationships that are strictly one to many. Construction of this model is difficult because the data are hard coded. When data are added to the database, the index must be completely redefined. In the relational model, however, new relations can be created by joining tables.

C . The network model organizes data through the development of relationships that are many to many. Construction is therefore difficult.

Question: 14 Which of the following structures refers to the collection of data for all vendors in a relational database?

- A. Record.
- B. Field.
- C. File.
- D. Byte.

Answer (C) is correct.

A file is a group of records. Each record refers to the collection of data for a specific vendor in the database.

- A . A record is a group of fields. All the fields contain information pertaining to a specific entity.
- B . A field is a group of bytes. The field contains a unit of data about a specific entity.
- D . A byte is a group of bits. A byte can be used to signify a character (a number, letter of the alphabet, or symbol).

Question: 15 What is the correct ascending hierarchy of data in a system?

- A. Character, record, file, field.
- B. Field, character, file, record.
- C. Character, field, record, file.
- D. Field, record, file, character.

Answer (C) is correct.

A character (byte) is composed of a group of bits, a field is a group of bytes, a record is a group of fields, and a file is a group of records.

- A . A record is a group of fields.
- B . A field is a group of characters (bytes), and a file is a group of records.
- D . A field is a group of characters (bytes).

Question: 16 Based only on the database file excerpt presented below, which one of the fields or combinations of fields is eligible for use as a key?

Column I	Column II	Column III	Column IV	Column V	Column VI
Florida	Sopchoppy	G9441	6	02/06/2009	US \$1823.65
Georgia	Hahira	H5277	2	02/06/2009	\$412.01
Iowa	Clear Lake	B2021	1	02/06/2009	\$6606.53
Iowa	Clear Lake	C2021	14	02/06/2009	\$178.90
Kansas	Lawrence	A1714	2	02/06/2009	\$444.28
Georgia	Milledgeville	A1713	1	02/06/2009	\$195.60

- A. Column I and Column II in combination.
- B. Column I and Column V in combination.
- C. Column III alone.
- D. Column IV and Column V in combination.

Answer (C) is correct.

Some field or combination of fields on each record is designated as the key. The essence of a key is that it contains enough information to uniquely identify each record; i.e., there can be no two records with the same key. Of the choices presented, only Column III by itself uniquely identifies each record.

- A . Column I and Column II in combination do not uniquely identify each record.
- B . Column I and Column V in combination do not uniquely identify each record.
- D . Column IV and Column V in combination do not uniquely identify each record.

Question: 17 Which one of the following correctly depicts the hierarchy of storage commonly found in computerized databases, from least complex to most complex?

- A. Byte, field, file, record.
- B. Byte, field, record, file.
- C. Field, byte, record, file.
- D. Field, byte, file, record.

Answer (B) is correct.

A byte is a group of bits (binary 1s and 0s). A field is a group of bytes. A record is a group of fields. A file is a group of records.

- A . A record is less complex than a file.

C . A byte is less complex than a field.

D . A byte is less complex than a field, and a record is less complex than a file.

Question: 18 In a database, there are often conditions that constrain database records. For example, a sales order cannot exist unless the corresponding customer exists. This kind of constraint is an example of

A. Normalization.

B. Entity integrity.

C. Internal schema.

D. Referential integrity.

Answer (D) is correct.

The data in a database are subject to the constraint of referential integrity. Thus, if data are collected about something, e.g., a payment voucher, all reference conditions regarding it must be met. Thus, for a voucher to exist, a vendor must also exist.

A . Normalization is the practice of decomposing database relations to remove data field redundancies and thus reduce the likelihood of update anomalies.

B . In a database, entity integrity means that each item or relationship in the database is uniquely identified by a single key value.

C . In a database, the internal schema describes the ways the data are physically organized.

Question: 19 The primary purpose of a database system is to have a single storage location for each

A. File.

B. Record.

C. Database.

D. Data item.

Answer (D) is correct.

Data organized in files and used by the organization's various applications are collectively known as a database. In a database system, storage structures are created that render the applications independent of the physical or logical arrangement of the data. Each data item has a standard definition, name, and format, and related items are linked by a system of pointers. The programs therefore only need to specify data items by name, not by location. A database management system handles retrieval and

storage. Because separate files for different applications are unnecessary, data redundancy (multiple storage locations for a data item) can be substantially reduced.

- A . Databases are not organized by file.
- B . Databases are not organized by records.
- C . The database is the collective result of organizing data in this way.

Question: 20 A database has three record types: (1) for suppliers, a type that contains a unique supplier number, a supplier name, and a supplier address; (2) for parts, a type that contains a unique part number, a part name, a description, and a location; and (3) for purchases, a type that contains a unique supplier number referencing the supplier number in the supplier record, a part number referencing the part number in the part record, and a quantity. This database has a

- A. Single flat file structure.
- B. Hierarchical structure.
- C. Relational structure.
- D. Network structure.

Answer (C) is correct.

A relational structure organizes data in conceptual tables. One relation (a table or file) can be joined with (related to) another by the DBMS without pointers or linked lists if each contains one or more of the same fields (also known as columns or attributes). This database has a relational structure because it includes no links that are not contained in the data records themselves.

- A . Each record type corresponds to a flat file, but there are multiple structures rather than a single flat file structure.
- B . A hierarchical structure would have a tree structure with embedded links instead of explicit data values.
- D . A network structure would have bidirectional pointers instead of explicit data values.

Question: 21 One of the principal objectives of a database system is to

- A. Reduce the overall complexity of data processing and data storage.
- B. Provide application programs with their own separate data files.
- C. Employ physical rather than logical data organization concepts.
- D. Improve data consistency by reducing data redundancy.

Answer (D) is correct.

In a database, storage structures are created that render the applications programs independent of the physical or logical arrangement of the data. Each data item has a standard definition, name, and format, and related items are linked by a system of pointers. The programs therefore only need to specify data items by name, not by location. A database management system handles retrieval and storage. Because separate files for different applications programs are unnecessary, data redundancy and inconsistency can be substantially reduced.

- A . Database systems increase complexity.
- B . Separate data files are eliminated.
- C . Physical data organization is eliminated.

Question: 22 A database is

- A. Essential for the storage of large data sets.
- B. A collection of related files.
- C. A real-time system.
- D. A network of computer terminals.

Answer (B) is correct.

The use of a database system significantly reduces redundancy of stored data in a system. Data in a standardized form are ideally entered once into integrated files and then used for any and all related applications. The database is usually built to serve multiple applications. Consequently, the data are independent of particular applications and greater flexibility in meeting unanticipated demands is possible. The database approach also allows for better access by users and for more rapid updating of information.

- A . The need for a database arises more from the multiplicity of applications than from the quantity of data stored.
- C . A database system need not provide immediate (real-time) responses.
- D . A database is an integrated, centralized group of files.

Question: 23 Which of the following is a primary function of a database management system (DBMS)?

- A. Report customization.
- B. Capability to create and modify the database.
- C. Financial transactions input.

D. Database access authorizations.

Answer (B) is correct.

A database management system (DBMS) is an integrated set of software tools superimposed on the data files that helps maintain the integrity of the underlying database. It allows programmers and designers to work independently of the physical and logical structure of the database. With a DBMS, the physical structure of the database can be completely altered without having to change any of the programs using the data items.

A . Although report customization may be an aspect of a DBMS, it is not the primary function.

C . Financial transactions input would be accomplished through the transaction processing system.

D . The database administrator, not the database management system, is responsible for providing database access authorizations.

Question: 24 In an inventory system on a database management system (DBMS), one stored record contains part number, part name, part color, and part weight. These individual items are called

A. Fields.

B. Stored files.

C. Bytes.

D. Occurrences.

Answer (A) is correct.

A record is a collection of related data items (fields). A field (data item) is a group of characters representing one unit of information.

B . A file is a group or set of related records ordered to facilitate processing.

C . A byte is a group of bits (binary digits). It represents one character.

D . Occurrences is not a meaningful term in this context.

Question: 25 An overall description of a database, including the names of data elements, their characteristics, and their relationship to each other, is defined by using a

A. Data definition language.

B. Data control language.

C. Data manipulation language.

D. Data command interpreter language.

Answer (A) is correct.

The data definition language defines the database structure and content, especially the schema (the description of the entire database) and subschema (logical views of the database). The schema specifies characteristics such as the names of the data elements contained in the database and their relationship to each other. The subschema defines the logical data views required for applications, which limits the data elements and functions available to each application.

B . The data control language specifies the privileges and security rules governing database users.

C . Data manipulation language provides application programs with a means of interacting with the database to add, retrieve, modify, or delete data or relationships.

D . Data command interpreter languages are symbolic character strings used to control the current state of database management system operations.

Question: 26 Enabling users to have different views of the same data is a function of

- A. The operating system.
- B. A program library management system.
- C. The database management system.
- D. A utility program.

Answer (C) is correct.

A database is characterized by the independence of applications from the physical arrangement of the data. Application programmers define a user view (external schema) of the data and write program instructions using a programming language interface with the DBMS. Consequently, programs need not specify the location of a data item. Only the name of the item is necessary. The DBMS mediates between user view and the actual physical arrangement of the data. Hence, different users (applications) may create different views of the data.

A . The operating system regulates the use of the components of the computer system.

B . A program library management system controls the movement of programs and job control statements into and out of the production program libraries.

D . Utility programs have special purpose functions, e.g., sorting, printing, or copying.

Question: 27 The function of a data dictionary is to

- A. Mark the boundary between two consecutive transactions.
- B. Describe and share information about objects and resources.

- C. Specify systems users.
- D. Specify privileges and security rules for objects and resources.

Answer (B) is correct.

A data dictionary is an organized and shared collection of information about the objects and resources used by the IS organization to deliver or exchange information internally and externally.

- A . The database management system log contains checkpoint records that mark the boundary between two consecutive transactions.
- C . Specification of system users is a function of the security features of a DBMS.
- D . The data control language specifies privileges and security rules for objects and resources.

Question: 28 An important function of a database administrator is

- A. Reviewing database output for errors and omissions.
- B. Scheduling daily database operations.
- C. Redefining and restructuring the database.
- D. Evaluating internal controls for hardware.

Answer (C) is correct.

The database administrator is the individual with overall responsibility for developing and maintaining the database. (S)he uses data definition language to define, create, redefine, and restructure the database. The database administrator also establishes controls over the integrity of the database.

- A . Reviewing output is a control group and user function.
- B . A database administrator's function is to exercise authority over the database, not to control daily computer operations.
- D . Evaluating hardware is not a function associated with a database administrator.

Question: 29 A logical view of an entire database is a

- A. Hierarchy.
- B. Network.
- C. Schema.

D. Subschema.

Answer (C) is correct.

The schema is the description of the structure or organization of the database using data description language. Either the physical or the logical structure of the database can be completely altered without having to change any of the programs using the data items; only the schema requires alteration. Data-description (or definition) language is used in database management systems to define not only the schema but also the structure of the portion of the database that each application program is authorized to access (subschema) and individual data items.

A . A hierarchy is one possible organizing principle for a database.

B . A network is one possible organizing principle for a database.

D . A subschema is a portion of a database.

Question: 30 The increased use of database processing systems makes managing data and information a major information service function. Because the databases of an organization are used for many different applications, they are coordinated and controlled by a database administrator. The functions of a database administrator are

A. Data input preparation, database design, and database operations.

B. Database design, database operation, and database security.

C. Database design, database operation, and equipment operations.

D. Database design, software support, and database security.

Answer (B) is correct.

A database administrator (DBA) is the person who has overall responsibility for developing, designing, controlling, and maintaining the database. The DBA manages all database functions including design and maintenance of the schema that describes the structure of the database. The DBA also assigns user passwords and establishes other security measures. Control of changes in data items and in the programs that use the database is another responsibility of the DBA.

A . The user is responsible for input preparation.

C . The manager of the IT department is responsible for equipment (hardware) operations.

D . The systems programming group is responsible for software support.

Question: 31 DB2, Oracle, SQL Server, and Access are

A. Library systems.

- B. Access control systems.
- C. Programming languages.
- D. Database management systems.

Answer (D) is correct.

A database management system (DBMS) is an integrated set of computer programs that creates the database, maintains the elements, safeguards the data from loss or destruction, and makes the data available to application programs and inquiries. The items listed are relational DBMS packages. DB2 (IBM) and Oracle (Oracle Corp.) are used in mainframes and mid-range systems (e.g., servers). SQL Server (Microsoft) is also used in mid-range systems. Access (Microsoft) is a DBMS system for personal computers.

- A . Library systems help in the maintenance of collections of data and program files.
- B . Access controls are security controls.
- C . Languages permit coding of instructions for execution by the computer. Not all of the terms given are for languages.

Question: 32 Which of the following is a critical success factor in data mining a large data store?

- A. Pattern recognition.
- B. Effective search engines.
- C. Image processing systems.
- D. Accurate universal resource locator (URL).

Answer (A) is correct.

Data mining allows a user to discover hidden relationships, such as associations, sequences of events, classifications (descriptions of the groups to which the item belongs), or clusters (new groupings previously not known). Typical applications of data mining are identification of potential customers and purchasing power.

- B . Effective search engines are not relevant when the data are not on the Internet.
- C . Image processing is irrelevant when the objective is to seek patterns in data.
- D . An accurate universal resource locator (URL) is not relevant when the data are not on the Internet.

Question: 33 An entity's database is modeled after a tree structure, with each record type having any number of lower-level dependent records. This is an example of which type of database model?

- A. Relational.
- B. Hierarchical.
- C. Network.
- D. Distributed.

Answer (B) is correct.

A hierarchical database model uses a tree structure in which each record has one antecedent but may have an unlimited number of subsequent records.

A . The data resemble sequential files and records, not an arrangement in conceptual tables with one or more fields in common.

C . A network structure has many-to-many relationships, not one-to-many; such structures are very difficult to maintain.

D . The data are not stored in a remote site as in a distributed system.

Question: 34 A business is designing its storage for accounts receivable information. What data file concepts should be used to provide the ability to answer customer inquiries as they are received?

- A. Sequential storage and chains.
- B. Sequential storage and indexes.
- C. Record keys, indexes, and pointers.
- D. Inverted file structure, indexes, and internal labels.

Answer (C) is correct.

A record key is an attribute that uniquely identifies or distinguishes each record from the others. An index is a table listing storage locations for attributes, often including those other than the unique record key attribute. A pointer is a data item that indicates the physical address of the next logically related record.

A . The ability to respond immediately to customers requires direct access.

B . The ability to respond immediately to customers requires direct access.

D . Internal labels are used to indicate various things to the computer, such as the contents of various types of data storage media, the beginning of each file (with identification information), and the end of each file. However, they do not provide information for locating specific records in a file. An inverted file structure (inverted list) is an index based on a secondary key, for example, years of experience rather than an employee number (the primary key).

Question: 35 Information systems (IS) strategy is determined by

- A. Business needs.
- B. Individual department needs.
- C. The technology available.
- D. Competitors' strategies.

Answer (A) is correct.

IS and information technology (IT) are vital to the successful implementation of an organization's strategy. IS strategy should be driven by the business needs and not by the functions of available technology when formulating a plan to achieve goals.

B . Individual departments may function well in terms of their own goals but still not serve the goals of the organization.

C . Technology is vital to the successful implementation of an organization's strategy. IS infrastructure purchases need to be implemented in accordance with the IS strategic plan to ensure business needs are met.

D . Although being familiar with the strategies of competitors is useful, strategy should be driven by the business's needs. Competitors' strengths and weaknesses may differ from those of the business.

Question: 36 Which of the following is (are) a type(s) of business strategy(ies)?

- A. Corporate-level strategy.
- B. Business-level strategy.
- C. Functional-level strategy.
- D. All are types of strategies.

Answer (D) is correct.

Organizations generally develop strategies at three different levels. Corporate-level strategy is concerned with market definition (i.e., business and markets to focus resources). Business-level strategy applies to organizations that have independent business units that each develop their own strategy.

Functional-level strategy concentrates on a specific functional area of the organization such as treasury, information systems, human resources, and operations.

A . Corporate-level strategy is concerned with market definition (i.e., business and markets to focus resources).

B . Business-level strategy applies to organizations that have independent business units that each develop their own strategy.

C . Functional-level strategy concentrates on a specific functional area of the organization such a treasury, information systems, human resources, and operations.

Question: 37 All of the following are true statements about mission and vision statements except

- A. The vision statement defines in a few sentences the organization's main purpose.
- B. The mission statement expands on the vision statement by communicating organization's goals.
- C. An IS strategic plan incorporates the organization's vision and mission to ensure the strategy employed matches the needs of a single department.
- D. The goals outlined in the mission statement should provide guidance for the IT infrastructure to create a detailed strategic plan.

Answer (C) is correct.

An IS strategic plan incorporates the organization's vision and mission to ensure the strategy employed includes the needs of the business as a whole. Individual departments may function well in terms of their own goals but still not serve the goals of the organization.

A . The vision statement defines in a few sentences the organization's main purpose.

B . The mission statement expands on the vision statement by communicating the organization's goals.

D . Goals should provide guidance for the IT infrastructure to create a detailed strategic plan to achieve the goals identified in the mission statement.

Question: 38 Which of the following is true about strategic drivers that help determine the outcome of an organization's strategy?

1. New technologies create opportunities for improvement and competitive advantage.
2. Customer relationship management (CRM) is a term that refers to practices, strategies, and technologies that companies use to manage and analyze customer interactions and data throughout the customer lifecycle.
3. Information systems (IS) has become a strategic driver in most, if not all, organizations.

A. 1 only.

- B. 2 only.
- C. 3 only.
- D. 1, 2, and 3.

Answer (D) is correct.

Strategic drivers are the critical elements that help determine the success or failure of an organization's strategy. New technologies create opportunities for improvement and competitive advantage. Customer relationship management (CRM) is a term that refers to practices, strategies, and technologies that companies use to manage and analyze customer interactions and data throughout the customer lifecycle. IS has become a strategic driver in most, if not all, organizations.

- A . 2 and 3 are also correct statements.
- B . 1 and 3 are also correct statements.
- C . 1 and 2 are also correct statements.

Question: 39 All of the following are correct statements regarding business information systems (IS) strategy and business information technology (IT) except

- A. Business IT strategy is focused on determining what technology and technological systems development are needed to accomplish the business IS strategy.
- B. Business IS strategy is focused on determining what IS must be provided to accomplish the goals of the business strategy.
- C. Business IT strategy concentrates on how to provide the information.
- D. Business IT strategy is focused on developing and explaining the information architecture that will provide the best return for the organization.

Answer (B) is correct.

Business IS strategy is focused on determining what IT must be provided to accomplish the goals of the business strategy.

- A . Business IT strategy is focused on determining what technology and technological systems development are needed to accomplish the business IS strategy.
- C . Business IT strategy concentrates on how to provide the information.
- D . Business IT strategy is focused on developing and explaining the information architecture that will provide the best return for the organization.

Question: 40 Which of the following outcomes is a likely benefit of information technology used for internal control?

- A. Processing of unusual or nonrecurring transactions.
- B. Enhanced timeliness of information.
- C. Potential loss of data.
- D. Recording of unauthorized transactions.

Answer (B) is correct.

The use of information technology typically increases the timeliness of information. Transactions are often recorded in real time, and information is available almost instantaneously.

- A . Technology is most useful to process numerous, routine transactions.
- C . Technology allows the capture of many attributes of transactions and typically increases the availability of information.
- D . The possibility of recording unauthorized transactions would not be considered a benefit of technology.

Question: 41 Governance, risk, and compliance (GRC) systems are representative of all of the following statements except

- A. GRC systems enable organizations to implement governance programs.
- B. GRC systems concentrate on an individual function within an organization.
- C. GRC systems assist with compliance with government requirements.
- D. GRC systems have the potential of identifying and lowering costs.

Answer (B) is correct.

A characteristic of successful GRC systems is that information cascades throughout the organization, improving various functions. Thus, GRC systems concentrate on multiple functions within an organization.

- A . GRC systems enable organizations to manage the governance program strategy. GRC systems assist management with monitoring, evaluating, and enforcing policies, standards, and procedures established to ensure compliance.
- C . A characteristic of successful GRC systems is compliance with laws and regulations.

D . A characteristic of successful GRC systems is increasing the efficiency and effectiveness of business operations while reducing costs.

Question: 42 Which of the following statements is not indicative of governance, risk, and compliance (GRC) systems?

- A. GRC systems are associated with monitoring controls.
- B. Federal and local government rules are considered when implementing GRC systems.
- C. GRC systems are not tasked with identifying the source of risks.
- D. GRC systems enable organizations to manage the governance program strategy.

Answer (C) is correct.

GRC systems assist management with monitoring, evaluating, and enforcing policies, standards, and procedures established to ensure compliance. GRC systems assist with the identification of the roles of management and who owns each risk, controls risk content, and approves those risks.

A . Risk management, control monitoring, and information sharing are some of the characteristics associated with GRC systems.

B . Compliance with laws and regulations is a characteristic of successful GRC systems.

D . GRC systems enable organizations to manage the governance program strategy.

Question: 43 After using the report writer for several months, the marketing analysts gained confidence in using it, but the marketing department manager became concerned. Whenever analysts revised reports they had written earlier, the coding errors kept reappearing in their command sequences. The manager was sure that all the analysts knew what the errors were and how to avoid them. The most likely cause of the reappearance of the same coding errors is inadequate

- A. Backups.
- B. Change control.
- C. Access control.
- D. Testing.

Answer (B) is correct.

Change control manages changes in information system resources and procedures. It includes a formal change request procedure; assessments of change requests on technical and business grounds; scheduling changes; testing, installing, and monitoring changes; and reporting the status of recorded changes. The analysts were reusing erroneous code that should have been but was not corrected.

- A . Inadequate backups are not the cause of reuse of erroneous code.
- C . Inadequate access control is not the cause of reuse of erroneous code.
- D . Inadequate testing is not the cause of reuse of erroneous code.

Question: 44 Effective internal control for application development should provide for which of the following?

- I. A project steering committee to initiate and oversee the system
 - II. A technical systems programmer to evaluate systems software
 - III. Feasibility studies to evaluate existing systems
 - IV. The establishment of standards for systems design and programming
- A. I and III only.
 - B. I, II, and IV only.
 - C. I, III, and IV only.
 - D. II, III, and IV only.

Answer (C) is correct.

Effective systems development requires participation by top management. This can be achieved through a steering committee composed of higher-level representatives of system users. The committee approves or recommends projects and reviews their progress. Studies of the economic, operational, and technical feasibility of new applications necessarily entail evaluations of existing systems. Another necessary control is the establishment of standards for system design and programming. Standards represent user and system requirements determined during systems analysis.

- A . Standards must be established.
- B . A technical systems programmer has a role in the development and modification of the operating system but not necessarily in applications development. The technical support in this area would be provided by systems analysts rather than programmers.
- D . A technical systems programmer has a role in the development and modification of the operating system but not necessarily in applications development.

Question: 45 An IT manager has only enough resources to install either a new payroll system or a new data security system, but not both. Which of the following actions is most appropriate?

- A. Giving priority to the security system.
- B. Leaving the decision to the IT manager.
- C. Increasing IT staff output in order for both systems to be installed.

D. Having the information systems steering committee set the priority.

Answer (D) is correct.

The needs assessment and cost-benefit analysis should be conducted by those responsible for making the decision. In this case, the information systems steering committee is the appropriate decision maker.

A . Not enough information is given to conclude that priority should be given to the security system.

B . The IT manager should not be the only decision maker.

C . The question indicates that development of both systems is not possible.

Question: 46 An insurance firm that follows the systems development life cycle concept for all major information system projects is preparing to start a feasibility study for a proposed underwriting system. Some of the primary factors the feasibility study should include are

A. Possible vendors for the system and their reputation for quality.

B. Exposure to computer viruses and other intrusions.

C. Methods of implementation, such as parallel or cutover.

D. Technology and related costs.

Answer (D) is correct.

The feasibility study should consider the activity to be automated, the needs of the user, the type of equipment required, the cost, and the potential benefit to the specific area and the company in general. Thus, technical feasibility and cost are determined during this stage.

A . Possible vendors for the system and their reputation for quality would be determined after the feasibility study.

B . Exposure to computer viruses and other intrusions is part of the information requirements phase.

C . Methods of implementation, such as parallel or cutover, would be determined during the implementation and operations stage.

Question: 47 Responsibility for the control of end-user computing (EUC) exists at the organizational, departmental, and individual user level. Which of the following should be a direct responsibility of the individual users?

- A. Acquisition of hardware and software.
- B. Taking equipment inventories.
- C. Strategic planning of end-user computing.
- D. Physical security of equipment.

Answer (D) is correct.

EUC involves user-created or user-acquired systems that are maintained and operated outside of traditional information systems controls. In this environment, an individual user is ordinarily responsible for the physical security of the equipment (s)he uses.

- A . The acquisition of hardware and software is an organizational- and departmental-level responsibility.
- B . Taking equipment inventories is an organizational-level responsibility.
- C . Strategic planning is an organizational- and departmental-level responsibility.

Question: 48 Which of the following risks is more likely to be encountered in an end-user computing (EUC) environment as compared with a centralized environment?

- A. Inability to afford adequate uninterruptible power supply systems.
- B. User input screens without a graphical user interface (GUI).
- C. Applications that are difficult to integrate with other information systems.
- D. Lack of adequate utility programs.

Answer (C) is correct.

The risks arising from allowing end users to develop their own applications are the risks associated with decentralization of control. These applications may lack appropriate standards, controls, and quality assurance procedures.

- A . Inability to afford adequate uninterruptible power supply systems is a risk in all computing environments.

B . Almost all EUC environments have some form of GUI.

D . Lack of adequate utility programs is a risk in all computing environments.

Question: 49 A bank was considering its first use of computer-aided software engineering (CASE) to develop an inquiry system for account representatives to access consolidated profiles of customers' accounts. A benefit of using CASE in this situation is that

- A. No new software development tools would be needed.
- B. No training of programmers would be required.
- C. Management of the development process would be improved.
- D. The need for testing would be reduced.

Answer (C) is correct.

CASE applies computers to software design and development. It permits creation and maintenance of systems documentation on the computer and the automation of a part of the programming effort. Using CASE would improve management of the development process because the CASE software maintains the links between the different components, provides built-in project management tools, and supplies automated testing aids.

A . The first time CASE is used, the bank will have to acquire all the CASE development software.

B . The first time CASE is used, the bank will have to train programmers in its uses.

D . Using CASE does not reduce the need for testing to verify that program code matches specifications. However, the testing itself is more manageable because of automated testing aids provided by CASE.

Question: 50 Program documentation is a control designed primarily to ensure that

- A. Programmers have access to production programs.
- B. Programs do not make mathematical errors.
- C. Programs are kept up to date and perform as intended.
- D. No one has made use of the computer hardware for personal reasons.

Answer (C) is correct.

Complete, up-to-date documentation of all programs and associated operating procedures is necessary for efficient operation of a computer installation. Maintenance of programs is important to provide for continuity and consistency of data processing services to users. Program documentation (the program run manual) consists of problem statements, systems flowcharts, operating instructions, record layouts, program flowcharts, program listings, test data, and approval and change sheets.

- A . Programmers should not have access to production programs.
- B . Editing routines check for arithmetic errors prior to processing, and debugging should uncover errors in programs.
- D . Documentation cannot ensure computer security.

Question: 51 An electronics company has decided to implement a new system through the use of rapid application development techniques. Which of the following would be included in the development of the new system?

- A. Deferring the need for system documentation until the final modules are completed.
- B. Removing project management responsibilities from the development teams.
- C. Creating the system module by module until completed.
- D. Using object development techniques to minimize the use of previous code.

Answer (C) is correct.

The new system would be developed module by module until completed.

- A . System documentation is not eliminated or deferred by using rapid application development.
- B . Project management involves development teams.
- D . Object development might not be of use; if it were, it would increase usage of previous code.

Question: 52 Which of the following should be reviewed before designing any system elements in a top-down approach to new systems development?

- A. Types of processing systems used by competitors.
- B. Computer equipment needed by the system.
- C. Information needs of managers for planning and control.
- D. Controls in place over the current system.

Answer (C) is correct.

The functionality that the system will provide to the end users is always the first consideration.

- A . The systems used by competitors may be inappropriate to the entity's needs.
- B . Hardware needs cannot be assessed until the functionality of the system has been specified.
- D . Controls over the current system may be completely irrelevant to the new system.

Question: 53 Management of a company has a lack of segregation of duties within the application environment, with programmers having access to development and production. The programmers have the ability to implement application code changes into production without monitoring or a quality assurance function. This is considered a deficiency in which of the following areas?

- A. Change control.
- B. Management override.
- C. Data integrity.
- D. Computer operations.

Answer (A) is correct.

Over the life of an application, users are constantly asking for changes. The process of managing these changes is systems maintenance, and the relevant controls are program change controls. Thus, if programmers can implement application code changes into production without monitoring or a quality assurance function, program change controls are deficient.

B . Management override is an inherent limitation of any system of internal control.

C . Data integrity is assuring that data accurately reflects the business events underlying them and are not subject to tampering or destruction.

D . Computer operations include the work of console operators and librarians. Console operators are responsible only for the smooth running of the organization's medium- and large-scale computers. Librarians are responsible for releasing applications programs to analysts and programmers for modification and testing and for ensuring that the properly tested version is returned to production.

Question: 54 In which of the following phases of computer system development would training occur?

- A. Planning phase.
- B. Analysis phase.
- C. Design phase.
- D. Implementation phase.

Answer (D) is correct.

Training occurs during the implementation (installation and operation) phase of computer system development. Training and educating users is important not only for proper use of the system, but also to offset the resistance of users whose jobs may have been substantially changed. This phase also includes acceptance testing, system conversion, and system follow-up.

A . Training does not occur in the planning phase, which includes (1) preparing a proposal, (2) studying its feasibility, (3) determining information requirements, and (4) preparing the general design.

B . The analysis phase is the planning phase.

C . Training does not occur in the design phase, which includes (1) developing specifications, (2) analyzing objectives and policies, (3) determining decisions to be made, and (4) determining the information required to make decisions.

Question: 55 ABC, Inc., assessed overall risks of IT systems projects on two standard criteria: technology used and design structure. The following systems projects have been assessed on these risk criteria. Which of the following projects holds the highest risk to ABC?

	<u>Technology</u>	<u>Structure</u>
A.	Current	Sketchy
B.	New	Sketchy
C.	Current	Well defined
D.	New	Well defined

Answer (B) is correct.

New and unfamiliar technology holds more risks than known and stable technology. Also, sketchy design structure makes for greater uncertainty and thus higher risk.

A . Known and stable technology holds less risk than cutting-edge technology.

C . Known and stable technology holds less risk than cutting-edge technology. Also, when a design structure is well defined, risk is reduced.

D . When a design structure is well defined, risk is reduced.

Question: 56 Ordinarily, the analysis tool for the systems analyst and steering committee to use in selecting the best system alternative is

A. Pilot testing.

B. User selection.

C. Decision tree analysis.

D. Cost-benefit analysis.

Answer (D) is correct.

Feasibility studies should include an analysis of the cost-benefit ratio of any system alternatives. In many cases, the best possible system may not be cost effective. Thus, once the decision makers have determined that two or more systems alternatives are acceptable, the cost-benefit analysis should be used to select the best system for a particular application.

A . Pilot testing typically occurs after development of a system.

B . Users may not have the necessary systems knowledge to make a decision.

C . Decision tree analysis is probably more sophisticated than is necessary in choosing between a few systems alternatives.

Question: 57 Two phases of systems planning are project definition and project initiation. All of the following are steps in the project initiation phase except

A. Preparing the project proposal.

B. Informing managers and employees of the project.

C. Assembling the project team.

D. Training selected personnel.

Answer (A) is correct.

The project initiation phase includes promptly informing managers and employees about the project, assembling the project team (possibly including systems analysts, programmers, accountants, and users), training selected personnel to improve necessary skills and enhance communication among team members, and establishing project controls (e.g., by implementing a project scheduling technique such as PERT). Preparing the project proposal is a part of the project definition phase, as are conducting feasibility studies, determining project priority, and submitting the proposal for approval.

A . Informing managers and employees of the project is a component of the project initiation phase.

B . Assembling the project team is a component of the project initiation phase.

C . Assembling the project team is a component of the project initiation phase.

Question: 58 The process of learning how the current system functions, determining the needs of users, and developing the logical requirements of a proposed system is referred to as

- A. Systems maintenance.
- B. Systems analysis.
- C. Systems feasibility study.
- D. Systems design.

Answer (B) is correct.

A systems analysis requires a survey of the existing system, the organization itself, and the organization's environment to determine (among other things) whether a new system is needed. The survey results determine not only what, where, how, and by whom activities are performed but also why, how well, and whether they should be done at all. Ascertaining the problems and informational needs of decision makers is the next step. The systems analyst must consider the entity's key success variables (factors that determine its success or failure), the decisions currently being made and those that should be made, the factors important in decision making (timing, relation to other decisions, etc.), the information needed for decisions, and how well the current system makes those decisions. Finally, the systems analysis should establish the requirements of a system that will meet user needs.

A . Maintenance is the final stage of the life cycle in that it continues throughout the life of the system; maintenance includes the redesign of the system and programs to meet new needs or to correct design flaws.

C . The systems feasibility study does not involve the process of learning how the current system works.

D . Systems design is the process of developing a system to meet specified requirements.

Question: 59 The process of developing specifications for hardware, software, manpower, data resources, and information products required to develop a system is referred to as

- A. Systems analysis.
- B. Systems feasibility study.
- C. Systems maintenance.
- D. Systems design.

Answer (D) is correct.

Detailed systems design involves developing specifications regarding input, processing, internal controls and security measures, programs, procedures, output, and databases.

A . Systems analysis is the process of learning how the current system functions, determining the needs of users, and developing the logical requirements of a proposed system.

B . A feasibility study determines the technical, operational, and economic feasibility of a system.

C . Systems maintenance is the process of monitoring, evaluating, and modifying a system.

Question: 60 The least risky strategy for converting from a manual to a computerized accounts receivable system would be a

A. Direct conversion.

B. Parallel conversion.

C. Pilot conversion.

D. Database conversion.

Answer (B) is correct.

The least risky strategy for converting from a manual to a computerized system is a parallel conversion in which the old and new systems are operated simultaneously until satisfaction is obtained that the new system is operating as expected. Slightly more risky is a pilot conversion in which the new system is introduced by module or segment.

A . A direct conversion is more risky than a parallel conversion.

C . A pilot conversion is more risky than a parallel conversion.

D . A database conversion is more risky than a parallel conversion.

Question: 61 Workwell Company operates in several regions, with each region performing its data processing in a regional data center. The corporate management information systems (MIS) staff has developed a database management system to handle customer service and billing. The director of MIS recommended that the new system be implemented in the Southwestern Region to ascertain if the system operates in a satisfactory manner. This type of conversion is called a

A. Parallel conversion.

B. Direct conversion.

C. Prototype conversion.

D. Pilot conversion.

Answer (D) is correct.

A modular conversion approach entails switching to the new or improved system in organizational (division, region, product line, etc.) segments or system segments (accounts receivable, database, etc.). A pilot conversion is one in which the final testing and switchover are accomplished at one segment or division of the company.

- A . Parallel conversion operates the old and new systems simultaneously.
- B . Direct conversion involves immediate conversion to the new system throughout the organization.
- C . A prototype conversion involves developing and putting into operation successively more refined versions of the system until sufficient information is obtained to produce a satisfactory design.

Question: 62 Errors are most costly to correct during

- A. Programming.
- B. Conceptual design.
- C. Analysis.
- D. Implementation.

Answer (D) is correct.

Errors can be corrected most easily and clearly when they are found at an early stage of systems development. Their correction becomes more costly as the life cycle progresses. Because implementation is the last stage of the process listed, errors are most costly to correct when discovered at the implementation stage.

- A . Error correction at the programming level would be less costly than at the implementation stage.
- B . Error correction at the conceptual design level would be less costly than at the implementation stage.
- C . Error correction at the analysis level would be less costly than at the implementation stage.

Question: 63 The process of monitoring, evaluating, and modifying a system as needed is referred to as

- A. Systems analysis.
- B. Systems feasibility study.
- C. Systems maintenance.
- D. Systems implementation.

Answer (C) is correct.

Systems maintenance must be undertaken by systems analysts and applications programmers continuously throughout the life of a system. Maintenance is the redesign of the system and programs to meet new needs or to correct design flaws. Ideally, these changes should be made as part of a regular program of preventive maintenance.

A . Systems analysis is the process of determining user problems and needs, surveying the organization's present system, and analyzing the facts.

B . A feasibility study determines whether a proposed system is technically, operationally, and economically feasible.

C . Systems implementation involves training and educating system users, testing, conversion, and follow-up.

Question: 64 An information system (IS) project manager is currently in the process of adding a systems analyst to the IS staff. The new systems analyst will be involved with testing the new computerized system. At which stage of the systems development life cycle will the analyst be primarily used?

A. Cost-benefit analysis.

B. Requirements definition.

C. Flowcharting.

D. Development.

Answer (D) is correct.

The systems development life-cycle approach is the oldest methodology applied to the development of medium or large information systems. The cycle is analytically divisible into stages: definition, design, development, implementation, and maintenance. Testing is the most crucial step in the development stage of the life cycle.

A . Cost-benefit analysis is a part of the feasibility study conducted early in the life cycle.

B . Requirements are defined during the analysis or systems study stage.

C . Flowcharting is a necessary activity in all early stages of the life cycle.

Question: 65 A benefit of using computer-aided software engineering (CASE) technology is that it can ensure that

A. No obsolete data fields occur in files.

B. Users become committed to new systems.

C. All programs are optimized for efficiency.

D. Data integrity rules are applied consistently.

Answer (D) is correct.

CASE is an automated technology (at least in part) for developing and maintaining software and managing projects. A benefit of using CASE technology is that it can ensure that data integrity rules, including those for validation and access, are applied consistently across all files.

A . Obsolete data fields must be recognized by developers or users. Once recognized, obsolete data fields can be treated consistently in CASE procedures.

B . Using CASE will not ensure user commitment to new systems if they are poorly designed or otherwise do not meet users' needs.

C . Although it has the potential to accelerate system development, CASE cannot ensure that all programs are optimized for efficiency. In fact, some CASE-developed modules may need to be optimized by hand to achieve acceptable performance.

Question: 66 To be more responsive to its customers, a bank wants a system that will permit account representatives to consolidate information about all the accounts belonging to individual customers. Bank management is willing to experiment with different approaches because the requirements are evolving rapidly. The best development approach for this system is

A. Prototyping.

B. System development life cycle model.

C. Structured analysis and design technique.

D. Hierarchy-input-process-output.

Answer (A) is correct.

Prototyping is an approach that involves creating a working model of the system requested, demonstrating it for the user, obtaining feedback, and making changes to the underlying code. This process repeats through several iterations until the user is satisfied with the system's functionality. Formerly, this approach was derided as being wasteful of resources and tending to produce unstable systems, but with vastly increased processing power and high-productivity development tools, prototyping can, in some cases, be an efficient means of systems development.

B . The system development life cycle model is appropriate for highly structured operational applications whose requirements can be defined in advance. Thus, it is not suitable for the bank's application.

C . Structured analysis and design technique is a specific application of the system development life cycle model.

D . Hierarchy-input-process-output is a specific application of the system development life cycle model.

Question: 67 CASE (computer-aided software engineering) is the use of the computer to aid in the development of computer-based information systems. Which of the following could not be automatically generated with CASE tools and techniques?

- A. Information requirements determination.
- B. Program logic design.
- C. Computer program code.
- D. Program documentation.

Answer (A) is correct.

CASE applies the computer to software design and development. It maintains on the computer a library of standard program modules and all of the system documentation, e.g., data flow diagrams, data dictionaries, and pseudocode (structured English); permits development of executable input and output screens; and generates program code in at least skeletal form. Thus, CASE facilitates the creation, organization, and maintenance of documentation and permits some automation of the coding process. However, information requirements must be determined prior to using CASE.

- B . CASE may generate program logic design.
- C . CASE may generate computer program code.
- D . CASE may generate program documentation.

Question: 68 A systems development approach used to quickly produce a model of user interfaces, user interactions with the system, and process logic is called

- A. Neural networking.
- B. Prototyping.
- C. Reengineering.
- D. Application generation.

Answer (B) is correct.

Prototyping produces the first model(s) of a new system. This technique usually employs a software tool for quick development of a model of the user interface (such as by report or screen), interaction of users with the system (for example, a menu-screen approach or data entry), and processing logic (the executable module). Prototyping stimulates user participation because the model allows for quick exploration of concepts and development of solutions with quick results.

- A . Neural networking involves hardware or software that imitates the processing activities of the human brain.

C . Reengineering salvages reusable components of existing systems and restructures them to develop new systems or to improve the old systems.

D . An application generator is software that can be used to develop an application simply by describing its requirements to the computer rather than by writing a procedural program.

Question: 69 A major disadvantage of the life cycle approach to system development is that it is not well-suited for projects that are

- A. Structured.
- B. Large.
- C. Complex.
- D. Unstructured.

Answer (D) is correct.

The life cycle approach is best employed when systems are large and highly structured, users understand the tasks to be performed by the information system, and the developers have directly applicable experience in designing similar systems. In the life cycle process, each stage of development is highly structured, and requirements are clearly defined. However, when the task is unstructured, prototyping may be the better approach.

- A . The life cycle approach is better suited for structured projects.
- B . The life cycle approach is better suited for large projects.
- C . The life cycle approach is better suited for complex projects.

Question: 70 Advantages of life cycle methodologies are

- A. Lower overall development costs when requirements change frequently.
- B. Ability to give users a functioning system quickly.
- C. Reduced application development time to achieve a functioning system.
- D. Enhanced management and control of the development process.

Answer (D) is correct.

The systems development life cycle approach is the most common methodology applied to the development of large, highly structured application systems. The life cycle approach is based on the idea that an information system has a finite life span that is limited by the changing needs of the organization. This cycle is analytically divisible into stages. A new system life cycle begins when the inadequacy of the current system leads to a decision to develop a new or improved system. This method

is a structured process for controlling the creative activity required to devise, develop, and implement an information system. The process is described in varying terms by different writers, but the nature and sequence of the steps are essentially the same. Life cycle methodologies provide enhanced management and control of the development process because they provide structure for a creative process by dividing it into manageable steps and specifying what must be produced in each phase.

- A . Overall development costs are higher when requirements change frequently in a life cycle methodology.
- B . Life cycle methodologies are unable to give users a functioning system quickly.
- C . Life cycle methodologies require lengthy application development time to achieve a functioning system.

Question: 71 After reviewing the end-user computing (EUC) policy of an organization, an internal auditor audits the actuarial function and notices that some minimum control requirements are missing. Which of the following is a risk of using potentially incorrect end-user developed files?

- A. Management places the same degree of reliance on the files as they do on files generated from mainframe systems.
- B. Management receives limited information for decision making due to a lack of flexibility in EUC files.
- C. Management is unable to respond to competitive pressures quickly.
- D. Management continues to incur additional cost because it takes more hours to do the tasks using EUC.

Answer (A) is correct.

End-user developed applications may not be subject to an independent outside review by systems analysts and are not created in the context of a formal development methodology. These applications may lack appropriate standards, controls, quality assurance procedures, and documentation. A risk of end-user applications is that management may rely on them as much as traditional applications.

- B . EUC systems typically increase flexibility and responsiveness to management's information requests. Such systems are more easily modified.
- C . EUC systems typically reduce application development cycle time.
- D . EUC systems typically result in reduced application development and maintenance costs.

Question: 72 Which of the following is the final step before placing the system in live operation?

- A. Phased conversion.
- B. User acceptance testing.
- C. Dynamic testing.
- D. Static testing.

Answer (B) is correct.

IT must demonstrate to the user department that the system performs the desired functionality. Once the user department is satisfied with the new system, they acknowledge formal acceptance and implementation begins. Thus, user acceptance testing is the final step before placing the system in live operation.

A . Phased conversion is a strategy used to convert to a new system. Under this strategy, one function of the new system at a time is placed in operation.

C . Dynamic testing involves executing programmed code with a given set of test cases.

D . Static testing examines a program's code and its associated documentation through reviews, walkthroughs, or inspections but does not require the program to be executed.

Question: 73 All of the following are strategies for converting to a new system except

- A. Parallel operation.
- B. Direct cutover conversion.
- C. Pilot conversion.
- D. White-box testing.

Answer (D) is correct.

Information technology conversion can involve hardware, operating systems, database management systems, and applications. Conversion methods utilized are (1) direct cutover, (2) pilot conversion, (3) phased conversion, and (4) parallel conversion. White-box testing tests internal structures or workings of a program, as opposed to the functionality exposed to the end-user. Thus, white-box testing is not a strategy for converting to a new system.

A . Parallel operation involves running the old and new systems at full capacity for a given period. Parallel operation is a strategy for converting to a new system.

B . Direct cutover conversion involves simultaneously shutting down the old system and turning on the new system. Direct cutover conversion is a strategy for converting to a new system.

C . Pilot conversion involves fully converting to the new system one branch, department, or division at a time. Pilot conversion is a strategy for converting to a new system.

Question: 74 Which of the following are objectives for performing tests during system development?

- I. System responds correctly to all kinds of inputs
 - II. System achieves the general result its stakeholders desire
 - III. System meets the requirements that guided its design and development
 - IV. System performs its functions within an acceptable time
- A. I and III only.
 - B. II, III, and IV only.
 - C. I, II, and IV only.
 - D. I, II, III, and IV.

Answer (D) is correct.

Testing is performed during system development with the intent of identifying errors or other defects. The job of testing is an iterative process as when one error is corrected, it can illuminate other errors or even create new ones. All of the objectives listed are objectives for performing tests during system development.

A . The objectives also include ensuring the system achieves the general result stakeholders desire and performs its functions within an acceptable time.

B . The objectives also include ensuring the system responds correctly to all kinds of inputs.

C . The objectives also include ensuring the system meets the requirements that guided its design and development.

Question: 75 Gray-box testing involves

- A. Testing internal structures or workings of a program.
- B. Executing programmed code with a given set of test cases.
- C. Having knowledge of internal data structures and algorithms for purposes of designing tests.
- D. Examining functionality without any knowledge of the source code.

Answer (C) is correct.

Gray-box testing involves having knowledge of internal data structures and algorithms for the purpose of designing tests, while executing those tests at the user, or black-box, level.

- A . Testing internal structures or workings of a program describes white-box testing.
- B . Executing programmed code with a given set of test cases describes dynamic testing.
- D . Examining functionality without any knowledge of the source code describes black-box testing.

Question: 76 Which of the following is a correct statement regarding phased conversion?

- A. The old system is shut down, and the new one takes over processing immediately.
- B. The old and new systems both run at full capacity for a given period.
- C. One function at a time of the new system is placed in operation.
- D. One branch, department, or division at a time is fully converted to the new system.

Answer (C) is correct.

Information technology conversion can involve hardware, operating systems, database management systems, and applications. Conversion methods utilized are (1) direct cutover, (2) pilot conversion, (3) phased conversion, and (4) parallel conversion. Under phased conversion, one function of the new system at a time is placed in operation. For instance, if the new system is an integrated accounting application, accounts receivable could be installed, then accounts payable, cash management, materials handling, etc.

- A . Direct cutover conversion involves simultaneously shutting down the old system and having the new one take over processing immediately.
- B . Parallel operation involves running the old and new systems at full capacity for a given period.
- D . Pilot conversion involves fully converting to the new system one branch, department, or division at a time.

Question: 77 All of the following are characteristics associated with direct cutover conversion except

- A. Time-saving.
- B. Risky.
- C. Inexpensive.
- D. Safe.

Answer (D) is correct.

Direct cutover conversion involves simultaneously shutting down the old system and having the new one take over processing immediately. Direct cutover is the least expensive and time-consuming strategy, but it is also the riskiest.

- A . Direct cutover conversion is a time-saving strategy.
- B . Direct cutover conversion is the riskiest strategy.
- C . Direct cutover conversion is the least expensive strategy.

Question: 78 Which of the following is a correct statement regarding combinatorial test design?

- A. Identifies the number of tests needed to get the coverage developers want.
- B. Seeks to verify the interfaces between components against a software design.
- C. Tests a completely integrated system to verify that the system meets its requirements.
- D. Determines whether the system meets the organization's needs and is ready for release.

Answer (A) is correct.

Although the number of possible tests to apply is almost limitless, developers can't test everything. All testing uses strategy to select tests that are feasible for the available time and resources. Combinatorial test design identifies the number of tests needed to get the coverage developers want.

- B . Integration testing is any type of software testing that seeks to verify the interfaces between components against a software design.
- C . System testing, or end-to-end testing, tests a completely integrated system to verify that the system meets its requirements.
- D . Acceptance testing is conducted to determine whether the system meets the organization's needs and is ready for release.

Question: 79 Which of the following best describes acceptance testing?

- A. Determines whether the system meets the organization's needs and is ready for release.
- B. Tests a completely integrated system to verify that the system meets its requirements.
- C. Seeks to verify the interfaces between components against software design.
- D. Verifies the functionality of a specific section of code and the handling of data passed between various units.

Answer (A) is correct.

Acceptance testing is conducted to determine whether the system meets the organization's needs and is ready for release.

B . System testing, or end-to-end testing, tests a completely integrated system to verify that the system meets its requirements.

C . Integration testing is any type of software testing that seeks to verify the interfaces between components against software design.

D . Unit testing refers to tests that verify the functionality of a specific section of code and the handling of data passed between various units.

Question: 80 Which of the following statements is true regarding unit testing?

- I. Verifies the functionality of a specific section of code
 - II. Checks the handling of data passed between various units or subsystem components
- A. I only.
 - B. II only.
 - C. Neither.
 - D. I and II.

Answer (D) is correct.

Both statements are true regarding unit testing.

A . Verifying the functionality of a specific section of code is a true statement describing unit testing.

B . Checking the handling of data passed between various units or subsystem components is a true statement describing unit testing.

C . Verifying the functionality of a specific section of code and checking the handling of data passed between various units or subsystem components both are true statements describing unit testing.

Question: 81 Which of the following testing methods examines the program's code and its associated documentation through reviews, walkthroughs, or inspections but does not require the program be executed?

- A. Dynamic testing.
- B. Static testing.
- C. Gray-box testing.
- D. Black-box testing.

Answer (B) is correct.

Static testing examines the program's code and its associated documentation through reviews, walkthroughs, or inspections but does not require the program be executed.

A . Dynamic testing involves executing programmed code with a given set of test cases.

C . Gray-box testing involves having knowledge of internal data structures and algorithms for the purpose of designing tests, while executing those tests at the user, or black-box, level.

D . Black-box testing treats the software as a "black box", examining functionality without any knowledge of the source code.

Question: 82 During a post implementation review of an accounting information system (AIS), a CPA learned that an AIS with few customized features had been budgeted and scheduled to be installed over 9 months for US \$3 million (including hardware, software, and consulting fees). An in-house programmer was assigned as the project manager and had difficulty keeping the project on schedule. The implementation took 18 months, and actual costs were 30% over budget. Many features were added to the system on an ad-hoc basis, with the project manager's authorization. The end-users are very satisfied with the new system. The steering committee, however, is dissatisfied about the scope creep and would like a recommendation to consider before approving initiation of another large project. Based on those findings, the CPA should recommend implementing a

A. Change control system.

B. Contract management system.

C. Budgeting system.

D. Project timekeeping system.

Answer (A) is correct.

Over the life of an application, users are constantly asking for changes. The process of managing these changes is referred to as systems maintenance, and the relevant controls are called program change controls. Because the steering committee is dissatisfied with the implementation of the previous project, a change control system should be implemented to ensure that the next project is implemented in a more satisfactory manner.

B . Contract management involves activities such as designing and planning supply chains, designing facilities, warehousing, transporting and distributing goods, processing orders and collecting payments, managing inventory, and providing aspects of customer service.

C . Although a budgeting system could prevent project costs from going 30% over budget, it cannot address all the problems that arose during the implementation of the AIS.

D . Although a project timekeeping system could prevent project implementation from being 9 months behind schedule, it cannot address all the problems that arose during the implementation of the AIS.

Question: 83 What should a company do when seeking competitive advantages in planning for the implementation of a new software system?

- A. Design an optimal process and then align the software.
- B. Design the software to fit the existing processes.
- C. Direct manpower to the nonbottleneck process areas.
- D. Allow management to dictate processes.

Answer (A) is correct.

IT pervades every aspect of operations in a modern organization, and the IT steering committee must study each request for a new process and either approve or deny it. Once a new process or system has been approved, a project team is assembled, consisting of representatives of the end users who requested it and the IT personnel who will design and build the software components that will support it.

B . Logical design consists of mapping the flow and storage of the data elements that will be used by the new system and the new program modules that will constitute the new system.

C . Both the end users who specified the new system's functionality and IT management who are overseeing the development process must approve progress toward the completion of the system at the end of each stage of the systems development life cycle.

D . The everyday functioning of a business process affects multiple stakeholder groups. Input from each group should be considered in the design of the process. However, some stakeholders will be more active participants. End users are generally the drivers of a new or redesigned process.

Question: 84 At what phase in the systems development process is a report generated that describes the content, processing flows, resource requirements, and procedures of a preliminary system design?

- A. File and database design.
- B. Conceptual systems design.
- C. Physical systems design.
- D. Procedures design.

Answer (B) is correct.

The systems development life cycle begins with recognizing that there is a need for a new system, gaining an understanding of the situation to determine whether it is feasible to create a solution, and

formulating a plan. A formal proposal for a new system is submitted to the IT steering committee, describing the need for the application and the business function(s) that it will affect. Feasibility studies are conducted to determine (1) the technology the new system will require, (2) the economic resources that must be committed to the new system, and (3) the impact the new system will have on current operations.

A . Database design is the process of producing a detailed plan containing all the needed logical and physical design choices and physical storage parameters required to generate a data definition language that can be used to create a database.

C . Physical systems design involves planning the specific interactions of the new program code and data elements with the hardware platform (existing or planned for purchase) on which the new system will operate.

D . Procedures (or logical) design consists of mapping the flow and storage of the data elements that will be used by the new system and the new program modules that will constitute the new system. Data flow diagrams and structured flowcharts are commonly used in this step. Some data elements may already be stored in existing databases. Good logical design ensures that they are not duplicated.

Question: 85 The most appropriate data-gathering techniques for a system survey include interviews, quick questionnaires, observations, and

- A. Prototypes.
- B. Systems documentation.
- C. PERT charts.
- D. Gantt charts.

Answer (B) is correct.

A systems analysis involves documentation that includes a survey of the existing system, the organization itself, and the organization's environment to determine (among other things) whether a new system is needed. The survey results determine not only what, where, how, and by whom activities are performed but also why, how well, and whether they should be done at all.

A . Prototyping is an alternative approach to application development. Prototyping involves creating a working model of the system requested, demonstrating it for the user, obtaining feedback, and making changes to the underlying code.

C . PERT is a network method used to plan and control large projects.

D . Gantt charts are charts in which a series of horizontal lines shows the amount of work done or production completed in certain periods of time in relation to the amount planned for those periods.

Question: 86 Which of the following conversion strategies is characterized by a manager removing the old system and installing the new system without the possibility of reverting to the original?

- A. Direct changeover.
- B. Phased implementation.
- C. Parallel conversion.
- D. Integrated test facility.

Answer (A) is correct.

Under a direct changeover (direct cutover), the old system is shut down and the new one takes over processing immediately, thereby removing the possibility of reverting to the original.

B . Under a phased implementation, functions of the new system are placed into operation one at a time.

C . Under a parallel conversion, both the old and new systems are run at full capacity for a given period.

D . An integrated test facility creates a fictitious entity in a database to process test transactions simultaneously with live input.

Question: 87 Change control typically includes procedures for separate libraries for production programs and for test versions of programs. The reason for this practice is to

- A. Promote efficiency of system development.
- B. Segregate incompatible duties.
- C. Facilitate user input on proposed changes.
- D. Permit unrestricted access to programs.

Answer (B) is correct.

Separating production and test versions of programs ensures operators use the programs to fulfill their everyday responsibilities and do not have access to change programs. The effect is to segregate the incompatible functions of operators and programmers.

A . Production and test programs can be separated only if a specific procedure exists for placing programs in production libraries. Thus, maintaining the separation requires its own procedure, which may decrease development efficiency.

C . Separating production and test versions of programs is independent of facilitating user input on proposed changes.

D . Separating production and test versions of programs restricts access to programs.

Question: 88 A company often revises its production processes. The changes may entail revisions to processing programs. Ensuring that changes have a minimal impact on processing and result in minimal risk to the system is a function of

A. Security administration.

B. Change control.

C. Problem tracking.

D. Problem-escalation procedures.

Answer (B) is correct.

Change control is the process of authorizing, developing, testing, and installing coded changes so as to minimize the impact on processing and the risk to the system.

A . Security administration is concerned with access to data.

C . Problem tracking is concerned with collecting data to be analyzed for corrective action.

D . Problem escalation-procedures are a means of categorizing problems so that the least-skilled person can address them.

Question: 89 Minimizing the likelihood of unauthorized editing of production programs, job control language, and operating system software can best be accomplished by

A. Database access reviews.

B. Compliance reviews.

C. Good change control procedures.

D. Effective network security audits.

Answer (C) is correct.

Effective change control procedures include the requirement that every change be properly authorized.

A . Database reviews involve determining whether users have gained access to database areas for which they have no authorization or whether they are employing programs that provide them with unauthorized privileges to view or change information.

B . Compliance reviews involve determining whether an organization has complied with applicable internal and external procedures and regulations.

D . Network security audits involve reviewing the physical and logical controls over the network.

Question: 90 Which of the following access setups is appropriate in a computer environment?

	Update Access for Production Data		Update Access for Production Programs	
	Users Can?	Application Programmers Can?	Users Can?	Application Programmers Can?
A.	Yes	No	No	No
B.	Yes	No	No	Yes
C.	No	Yes	Yes	No
D.	No	Yes	Yes	Yes

Answer (A) is correct.

The appropriate setup for access in the computer environment is for users to have update access for production data. Users need to update data through applications programs, but have no need to change production programs.

B . Application programmers should not be able to change production programs. They should submit changes to the change control unit.

C . Application programmers should never have update access to production data. Users have no need to change production programs.

D . Application programmers should not be able to change production programs. They should submit changes to the change control unit. Application programmers should never have update access to production data.

Question: 91 Most large-scale computer systems maintain at least three program libraries: production library (for running programs); source code library (maintains original source coding); and test library (for programs which are being changed). Which of the following statements is correct regarding the implementation of sound controls over computer program libraries?

A. Only programmers should have access to the production library.

- B. Users should have access to the test library to determine whether all changes are properly made.
- C. Only the program librarian should be allowed to make changes to the production library.
- D. The computer operator should have access to both the production library and the source code library to assist in diagnosing computer crashes.

Answer (C) is correct.

The program librarian is accountable for, and has custody of, the programs in the production library.

A . Effective control requires that programmers not be able to make undetected, unrecorded changes in data or programs. Thus, programmers should not have access to the production library.

B . Programmers should be responsible for making program changes, and users should be responsible for testing the changes. Hence, users should not have access to the test library. Accountability for changes would be diminished. Moreover, users may lack the competence to make appropriate changes.

D . If the operator has access to both program libraries, (s)he may be able to make unauthorized and undetected changes to the computer programs.

Question: 92 Preventing someone with sufficient technical skill from circumventing security procedures and making changes to production programs is best accomplished by

- A. Reviewing reports of jobs completed.
- B. Comparing production programs with independently controlled copies.
- C. Running test data periodically.
- D. Providing suitable segregation of duties.

Answer (D) is correct.

When duties are separated, users cannot obtain a detailed knowledge of programs and computer operators cannot gain unsupervised access to production programs.

A . The reviews of jobs processed will disclose access, but will not prevent it.

B . Comparison of production programs and controlled copies will disclose changes, but will not prevent them.

C . Periodic running of test data will detect changes, but will not prevent them.

Question: 93 The marketing department's proposal was finally accepted, and the marketing employees attended a class in using the report writer. Soon, the marketing analysts found that it was easier to download the data and manipulate it on their own desktop computers in spreadsheets than to

perform all the data manipulation on the server. One analyst became highly skilled at downloading and wrote downloading command sequences for the other employees. When the analyst left the company for a better job, the department had problems making modifications to these command sequences. The department's problems are most likely due to inadequate

- A. Documentation.
- B. Data backup.
- C. Program testing.
- D. Antivirus software.

Answer (A) is correct.

One risk of end-user computing is that documentation may be poor and that important knowledge may be limited to one person. The command sequences should have been documented so that other analysts could use and modify them readily.

B . The inability of other analysts to understand the command sequences is not a function of inadequate data backup procedures.

C . The inability of other analysts to understand the command sequences is not a function of inadequate testing.

D . The inability of other analysts to understand the command sequences is not a function of inadequate use of antivirus software.

Question: 94 Traditional information systems development procedures that ensure proper consideration of controls may not be followed by users developing end-user computing (EUC) applications. Which of the following is a prevalent risk in the development of EUC applications?

- A. Management decision making may be impaired due to diminished responsiveness to management's requests for computerized information.
- B. Management may be less capable of reacting quickly to competitive pressures due to increased application development time.
- C. Management may place the same degree of reliance on reports produced by EUC applications as it does on reports produced under traditional systems development procedures.
- D. Management may incur increased application development and maintenance costs for EUC systems, compared with traditional (mainframe) systems.

Answer (C) is correct.

End-user developed applications may not be subject to an independent outside review by systems analysts and are not created in the context of a formal development methodology. These applications may lack appropriate standards, controls, quality assurance procedures, and documentation. A risk of end-user applications is that management may rely on them as much as traditional applications.

- A . EUC systems typically increase flexibility and responsiveness to management's information requests. Such systems are more easily modified.
- B . EUC systems typically reduce application development cycle time.
- D . EUC systems typically result in reduced application development and maintenance costs.

Question: 95 When the labor cost accounting component of an integrated end-user computer (EUC) application was first implemented, it did not meet certain business requirements in the department and had to be substantially rewritten. Which of the following risks associated with EUC application development could have led directly to this result?

- A. End-user applications may not receive the independent testing associated with traditional development.
- B. There may be insufficient review and analysis of user needs when user and analyst functions are no longer separate.
- C. End-user applications may not be adequately documented to facilitate review.
- D. Segregation of duties would be inadequate if the same person performed programmer and operator functions.

Answer (B) is correct.

Unlike IT-developed and supported applications, user-developed applications are not reviewed by systems analysts prior to implementation. This lack of review may result in the rewrite of user-developed applications to better meet business requirements.

- A . Independent testing might not be relevant to the business requirements.
- C . Failure to meet business requirements, not inadequate documentation, is the relevant risk.
- D . The lack of segregation of duties between user and analyst, resulting in failure to meet business requirements, is the relevant risk, not the lack of segregation of duties between programmer and operator.

Question: 96 The accountant who prepared a spreadsheet model for workload forecasting left the company, and the accountant's successor was unable to understand how to use the spreadsheet. The best control for preventing such situations from occurring is to ensure that

- A. Use of end-user computing resources is monitored.

- B. End-user computing efforts are consistent with strategic plans.
- C. Documentation standards exist and are followed.
- D. Adequate backups are made for spreadsheet models.

Answer (C) is correct.

The accountant's successor could not use the forecasting model because of inadequate documentation. By requiring that documentation standards exist and are followed, the company will enable new employees to understand internally developed programs when the developer leaves the organization.

- A . Monitoring concerns controlling the use of resources.
 - B . Consistency with strategic plans concern evaluation of the system.
 - D . Maintaining adequate backups for spreadsheet models is necessary, but lack of adequate backup is not the reason the accountant's successor could not use the forecasting model.
-

PART 3 UNIT 6

Question: 1 The practice of maintaining a test program library separate from the production program library is an example of

- A. An organizational control.
- B. Physical security.
- C. An input control.
- D. A concurrency control.

Answer (A) is correct.

This separation is an organizational control. Organizational controls concern the proper segregation of duties and responsibilities within the information systems department. Although proper segregation is desirable, functions that would be considered incompatible if performed by a single individual in a manual activity are often performed through the use of an information systems program or series of programs. Thus, compensating controls may be necessary, such as library controls, effective supervision, and rotation of personnel. Segregating test programs makes concealment of unauthorized changes in production programs more difficult.

B . Physical security (e.g., climate control and restrictions on physical access) is another aspect of organizational control.

C . Input controls validate the completeness, accuracy, and appropriateness of input.

D . Concurrency controls manage situations in which two or more programs attempt to use a file or database at the same time.

Question: 2 Which of the following terms best describes the type of control practice evidenced by a segregation of duties between computer programmers and computer operators?

- A. Systems development control.
- B. Hardware control.
- C. Applications control.
- D. Organizational control.

Answer (D) is correct.

Organizational control concerns the proper segregation of duties and responsibilities within the information systems function. For example, programmers should not have access to the equipment, and operators should not have programming ability. Although proper segregation is desirable, functions that would be considered incompatible if performed by a single individual in a manual activity are often

performed through the use of an information systems program or series of programs. Therefore, compensating controls may be necessary, such as library controls and effective supervision.

- A . Systems development controls concern systems analysis, design, and implementation.
- B . Hardware controls are incorporated into the equipment.
- C . Applications controls pertain to specific programs. They include input, processing, and output controls.

Question: 3 For control purposes, which of the following should be organizationally segregated from the computer operations function?

- A. Data conversion.
- B. Surveillance of screen display messages.
- C. Systems development.
- D. Minor maintenance according to a schedule.

Answer (C) is correct.

Systems development is performed by systems analysts and application programmers.

- A . Data conversion may be assigned to computer operations.
- B . Surveillance of screen display messages may be assigned to computer operations.
- D . Minor maintenance according to a schedule may be assigned to computer operations.

Question: 4 An organization's computer help-desk function is usually a responsibility of the

- A. Applications development unit.
- B. Systems programming unit.
- C. Computer operations unit.
- D. User departments.

Answer (C) is correct.

Help desks are usually a responsibility of computer operations because of the operational nature of their functions. A help desk logs reported problems, resolves minor problems, and forwards more difficult problems to the appropriate information systems resources, such as a technical support unit or vendor assistance.

- A . Applications development is responsible for developing systems, not providing help to end users.

B . The responsibility of systems programming is to implement and maintain system-level software, such as operating systems, access control software, and database systems software.

D . User departments usually lack the expertise to solve computer problems.

Question: 5 When a new application is being created for widespread use in a large organization, the principal liaison between the IT function and the rest of an organization is normally a(n)

- A. End user.
- B. Application programmer.
- C. Maintenance programmer.
- D. Systems analyst.

Answer (D) is correct.

Systems analysts are specifically qualified to analyze and design computer information systems. They survey the existing system, analyze the organization's information requirements, and design new systems to meet those needs. Systems analysts communicate with the entire organization and act as liaisons between the organization and the IT function.

A . End users make up the rest of the organization.

B . Programmers design, write, test, and document the specific programs developed by systems analysts. It is not the responsibility of an application programmer to act as a liaison between the IT department and the rest of the organization.

C . Programmers design, write, test, and document the specific programs developed by systems analysts. It is not the responsibility of a maintenance programmer to act as a liaison between the IT department and the rest of the organization.

Question: 6 In the organization of the IT function, the most important segregation of duties is

- A. Not allowing the data librarian to assist in data processing operations.
- B. Ensuring that those responsible for programming the system do not have access to data processing operations.
- C. Having a separate information officer at the top level of the organization outside of the accounting function.
- D. Using different programming personnel to maintain utility programs from those who maintain the application programs.

Answer (B) is correct.

Segregation of duties is a general control that is vital in a computerized environment. Some segregation of duties common in noncomputerized environments may not be feasible in a computer environment. However, certain tasks should not be combined. Systems analysts and programmers should be separate from computer operators. Both programmers and analysts may be able to modify programs, files, and controls and should therefore have no access to those programs nor to computer equipment. Operators should not be assigned programming duties or responsibility for systems design and should have no opportunity to make changes in programs and systems.

A . Librarians maintain control over documentation, programs, and data files; they should have no access to equipment, but they can assist in data processing operations.

C . A separate information officer outside of the accounting function would not be as critical a segregation of duties as that between programmers and processors.

D . Programmers usually handle all types of programs.

Question: 7 Which of the following represents an internal control weakness in a computer-based system?

A. Computer programmers write and revise programs designed by analysts.

B. The end users are responsible for reconciling reports and other output.

C. The computer librarian maintains custody and recordkeeping for computer application programs.

D. Computer operators have access to operator instructions and the authority to change programs.

Answer (D) is correct.

Computer operators need access to operator instructions. Otherwise, they could not perform their duties. Operators, however, should not have the authority to change computer programs.

A . Writing and revising computer programs are appropriate functions for programmers.

B . Reconciling reports is an appropriate function of end users.

C . Maintaining custody and related recordkeeping for computer programs is appropriate for a computer librarian.

Question: 8 The duties properly assigned to an information security officer could include all of the following except

A. Developing an information security policy for the organization.

B. Maintaining and updating the list of user passwords.

C. Commenting on security controls in new applications.

D. Monitoring and investigating unsuccessful access attempts.

Answer (B) is correct.

The information security officer should not know user passwords. They are normally stored on a computer in encrypted format, and users change them directly.

A . Developing an information security policy for the organization is an appropriate duty of the information security officer.

C . Commenting on security controls in new applications is an appropriate duty of the information security officer.

D . Monitoring and investigating unsuccessful access attempts is an appropriate duty of the information security officer.

Question: 9 In a large organization, the biggest risk in not having an adequately staffed information center help desk is

A. Increased difficulty in performing application audits.

B. Inadequate documentation for application systems.

C. Increased likelihood of use of unauthorized program code.

D. Persistent errors in user interaction with systems.

Answer (D) is correct.

The biggest risk in not having an adequately staffed help desk is that users will unknowingly persist in making errors in their interaction with the information systems.

A . Application audits should be about the same difficulty with or without an adequately staffed help desk.

B . Preparation of documentation is a development function, not a help desk function.

C . The likelihood of use of unauthorized program code is a function of change control, not of a help desk.

Question: 10 Which of the following activities would most likely be performed in the computer processing department?

A. Initiation of changes to master records.

B. Conversion of information to machine-readable form.

C. Correction of transactional errors.

D. Initiation of changes to existing applications.

Answer (B) is correct.

Conversion of information from source documents to computer-readable form is an activity likely to be performed using computer equipment. Conversion is a necessary part of the input process and effective control should be maintained over data handling during input as well as all other phases of information processing.

A . Effective segregation of duties requires that authorization of changes be initiated by someone not involved in processing data.

C . Transaction errors should be corrected by those responsible for initiation of the transactions. However, errors in the conversion process should be handled by the computer department.

D . User departments initiate applications changes.

Question: 11 If a payroll system continues to pay employees who have been terminated, control weaknesses most likely exist because

A. Procedures were not implemented to verify and control the receipt by the computer processing department of all transactions prior to processing.

B. There were inadequate manual controls maintained outside the computer system.

C. Programmed controls such as limit checks should have been built into the system.

D. Input file label checking routines built into the programs were ignored by the operator.

Answer (B) is correct.

The authorization to pay employees comes from outside the computer department. Thus, inadequate controls external to the computer processing department are most likely the cause of allowing the payments to terminated employees to continue without detection.

A . Batch totals constitute adequate controls over properly authorized transactions but provide no control over unauthorized transactions.

C . A limit check tests the reasonableness of a particular transaction but not whether it was authorized.

D . Paying proper attention to input file labels (header labels) will not detect unauthorized transactions.

Question: 12 The most critical aspect of segregation of duties within information systems is between

A. Project leaders and programmers.

B. Programmers and computer operators.

- C. Management and users.
- D. Programmers and systems analysts.

Answer (B) is correct.

The computer operator should not be assigned programming responsibility and have the opportunity to make changes in programs as (s)he operates the equipment. In general, achieving control through segregation of duties in the computer department requires that computer personnel have no access to assets and that access to computer operation, possession of files, and development of program logic be strictly segregated.

A . Combining the duties of project leaders and programmers affords less opportunity to commit irregularities than combining programming and computer operation, although segregation of these duties might enhance control.

C . Combining the duties of management and users affords less opportunity to commit irregularities than combining programming and computer operation, although segregation of these duties might enhance control.

D . Combining the duties of programmers and systems analysts affords less opportunity to commit irregularities than combining programming and computer operation, although segregation of these duties might enhance control.

Question: 13 To maintain effective segregation of duties within the information technology function, an application programmer should have which of the following responsibilities?

- A. Modify and adapt operating systems software.
- B. Correct detected data entry errors for the cash disbursement system.
- C. Code approved changes to a payroll program.
- D. Maintain custody of the billing program code and its documentation.

Answer (C) is correct.

Applications programmers design, write, test, and document computer programs according to specifications provided by the end users. The programmers are responsible for designing, building, and maintaining the organization's applications. Under no circumstances should programmers be able to make changes directly to programs that are used in "live" production. A separate processing area devoted to development and testing should be set up and dedicated to the use of programmers.

A . Systems programmers maintain and fine-tune the operating systems on the organization's medium- and large-scale computers. The operating system is the core software that performs the computer's basic tasks of input, output, and storage.

B . The end users of the cash disbursement system should be able to access and alter the data pertaining to their job duties.

D . Maintaining custody of the billing program code and its documentation is the responsibility of the IT librarians.

Question: 14 In a large multinational organization, which of the following job responsibilities should be assigned to the network administrator?

- A. Managing remote access.
- B. Developing application programs.
- C. Reviewing security policy.
- D. Installing operating system upgrades.

Answer (A) is correct.

Network administrators are responsible for developing and maintaining the organization's databases and for establishing controls to protect their integrity. Managing remote access would be one method used by network administrators to protect the integrity of the organization's databases.

B . Systems analysts and applications programmers develop application programs.

C . The IT security officer is responsible for formulating and enforcing a formal information security policy for all employees and outside parties who have access to the organization's systems.

D . Installing operating systems upgrades is accomplished by the organization's systems programmers.

Question: 15 Which of the following information technology (IT) departmental responsibilities should be delegated to separate individuals?

- A. Network maintenance and wireless access.
- B. Data entry and antivirus management.
- C. Data entry and application programming.
- D. Data entry and quality assurance.

Answer (C) is correct.

Application programmers design, write, test, and document computer programs according to specifications provided by the end users. End user departments should be able to access and alter only the data pertaining to their job duties. They should never be able to access the code underlying application programs.

A . Network technicians maintain the bridges, hubs, routers, switches, cabling, and other devices that interconnect the organization's computers. They are also responsible for maintaining the organization's connection to other networks.

B . Data entry and antivirus management are unrelated activities and can be assigned to the same person.

D . Data entry and quality assurance are unrelated activities and can be assigned to the same person.

Question: 16 In a large firm, custody of an entity's data is most appropriately maintained by which of the following personnel?

A. Data librarian.

B. Systems analyst.

C. Computer operator.

D. Computer programmer.

Answer (A) is correct.

Librarians maintain control over and accountability for documentation, programs, and data storage media.

B . A systems analyst uses his or her detailed knowledge of the organization's databases and applications programs to determine how an application should be designed to best serve the users' needs.

C . Computer operators are responsible for the moment-to-moment running of the organization's medium- and large-scale computers.

D . Computer programmers maintain the firm's systems and application software.

Question: 17 What is the role of the systems analyst in an IT environment?

A. Developing long-range plans and directing application development and computer operations.

B. Designing systems, preparing specifications for programmers, and serving as intermediary between users and programmers.

C. Maintaining control over the completeness, accuracy, and distribution of input and output.

D. Selecting, implementing, and maintaining system software, including operating systems, network software, and the database management system.

Answer (B) is correct.

Users within the organization constantly request new systems and applications. Systems analysts are responsible for designing, building, and maintaining these applications. Because users and programmers should never be able to make changes directly to programs that are used in “live” production and should never have access to live production data, analysts serve as intermediaries between users and programmers.

A . Management is responsible for developing long-range plans and directing application development and computer operations. Business intelligence is what gives upper management the information it needs to know where the organization is and how to steer it in the intended direction.

C . Librarians maintain control over and accountability for documentation, programs, and data storage media.

D . Database administrators are responsible for developing and maintaining the organization’s databases and for establishing controls to protect their integrity.

Question: 18 Which of the following areas of responsibility are normally assigned to a systems programmer in a computer system environment?

- A. Systems analysis and applications programming.
- B. Data communications hardware and software.
- C. Operating systems and compilers.
- D. Computer operations.

Answer (C) is correct.

Systems programmers write systems software. Systems software is usually purchased from vendors in machine or assembly language. It is necessary to facilitate the processing of application programs by the computer. It performs the fundamental tasks needed to manage computer resources, such as language translation, monitoring of data communications, job instruction, control of input and output, file management, data sorting, and access control. For example, the operating system mediates between the application programs and the computer hardware, and procedural languages may be translated into executable code (machine language) by compilers.

A . Systems analysts analyze and design computer systems. They should provide no programming services or have access to programs, equipment, data, or controls. Moreover, effective control should segregate systems and applications programming.

B . Systems programmers should not have access to operational hardware and software.

D . Database/network/web administrators are responsible for managing, supervising, and oversight of computer facilities.

Question: 19 Which of the following internal control procedures would prevent an employee from being paid an inappropriate hourly wage?

- A. Having the supervisor of the data entry clerk verify that each employee's hours worked are correctly entered into the system.
- B. Using real-time posting of payroll so there can be no after-the-fact data manipulation of the payroll register.
- C. Giving payroll data entry clerks the ability to change any suspicious hourly pay rates to a reasonable rate.
- D. Limiting access to employee master files to authorized employees in the personnel department.

Answer (D) is correct.

Only personnel department employees should have access to employee master files where pay rates, hire dates, etc., are stored.

- A . The setting of hourly wages should only be performed by personnel department employees.
- B . Real-time posting of payroll will not prevent improper wage rates from being set.
- C . Only personnel department employees should be able to change hourly pay rates.

Question: 20 Which one of the following represents a lack of internal control in a computer-based system?

- A. The design and implementation is performed in accordance with management's specific authorization.
- B. Any and all changes in application programs have the authorization and approval of management.
- C. Provisions exist to ensure the accuracy and integrity of computer processing of all files and reports.
- D. Programmers have access to change programs and data files when an error is detected.

Answer (D) is correct.

A functional segregation of computer activities is necessary for internal control. A programmer designs program flowcharts and writes the computer programs as required by the system. Once the program has been debugged and the documentation prepared, the programmer should have no further access to it or to data files. A librarian is responsible for permitting only computer operators, not programmers, to have access to programs.

A . The design and implementation should be authorized by management to maintain effective internal controls.

B . Activities that involve making changes in application programs should be authorized and approved by management to maintain effective internal controls.

C . Effective internal control ensures the reliability of records. A control group (clerk) should continuously supervise and monitor input, operations, and distribution of output.

Question: 21 One of the major problems in a computer system is that incompatible functions may be performed by the same individual. One compensating control is the use of

A. Echo checks.

B. A check digit system.

C. Computer-generated hash totals.

D. A computer log.

Answer (D) is correct.

A computer (console) log is a record of computer and software usage usually produced by the operating system. Proper monitoring of the log is a compensating control for the lack of segregation of duties. For instance, the log should list operator interventions.

A . Echo checks are hardware controls used to determine if the correct message was received by an output device.

B . A check digit system is an input control that tests identification numbers.

C . Hash totals are control totals used to check for losses or inaccuracies arising during data movement.

Question: 22 Which of the following statements about the responsibilities of IT personnel is true?

A. Computer help desk function is usually a responsibility of the systems programming unit.

B. Programmers should ideally have no access to production data.

C. A systems analyst is the individual who has overall responsibility for developing and maintaining the database and for establishing controls to protect its integrity.

D. Operators are specifically qualified to analyze and design computer information systems.

Answer (B) is correct.

Programmers design, write, test, and document the specific programs according to specifications developed by systems analysts. Because they can modify programs, data, and controls they should have

no access to production programs or data but should have access to test data in order to carry out their duties.

A . The computer help desk function is usually a responsibility of computer operations because of the nature of their functions.

C . The database administrator (DBA) has overall responsibility for developing and maintaining the database and for establishing controls to protect its integrity.

D . Systems analysts are specifically qualified to analyze and design computer information systems.

Question: 23 Which of the following is true concerning HTML?

- A. The acronym stands for HyperText Material Listing.
- B. The language is among the most difficult to learn.
- C. The language is independent of hardware and software.
- D. HTML is the only language that can be used for Internet documents.

Answer (C) is correct.

HTML is the most popular language for authoring web pages. It is hardware and software independent, which means that it can be read by several different applications and on many different kinds of computer operating systems. HTML uses tags to mark information for proper display on web pages.

A . HTML is the acronym for Hypertext Markup Language.

B . The language is relatively easy to learn. Almost anyone can learn and use HTML, not just computer programmers.

D . A number of other languages can be used for Internet transmissions, including JAVA and XML.

Question: 24 Which of the following is a false statement about XBRL?

- A. XBRL is freely licensed.
- B. XBRL facilitates the automatic exchange of information.
- C. XBRL is used primarily in the U.S.
- D. XBRL is designed to work with a variety of software applications.

Answer (C) is correct.

XBRL stands for eXtensible Business Reporting Language. It is being developed for business and accounting applications. It is an XML-based application used to create, exchange, and analyze financial reporting information and is being developed for worldwide use.

A . The AICPA-led consortium that developed XBRL has promoted the application as a freely licensed product.

B . XBRL will facilitate the exchange of information.

D . XBRL will allow exchange of data across many platforms and will soon be integrated into accounting software applications and products.

Question: 25 The Internet consists of a series of networks that include

A. Gateways to allow personal computers to connect to mainframe computers.

B. Bridges to direct messages through the optimum data path.

C. Repeaters to physically connect separate local area networks (LANs).

D. Routers to strengthen data signals between distant computers.

Answer (A) is correct.

The Internet facilitates information transfer among computers. Gateways are hardware or software products that allow translation between two different protocol families. For example, a gateway can be used to exchange messages between different email systems.

B . Routers are used to determine the best path for data.

C . Bridges connect LANs.

D . Repeaters strengthen signals.

Question: 26 Which of the following computer hardware devices allows for an immediate update of merchandise inventory in a retail environment?

A. Inventory control terminal.

B. Monitor.

C. Video display terminal.

D. Point-of-sale terminal.

Answer (D) is correct.

Point-of-sale terminals capture data by optical scanning or by keying. The data are then transmitted to a CPU. The system permits collection of sales data, updating and ordering of inventory, pricing at the point of sale, and checking of customer credit cards.

A . This term is not meaningful in this context.

B . A monitor is a video display device that is the most common device used for human-computer interaction.

C . A video display terminal is a video display device that is the most common device used for human-computer interaction.

Question: 27 The most difficult aspect of using Internet resources is

- A. Making a physical connection.
- B. Locating the best information source.
- C. Obtaining the equipment required.
- D. Getting authorization for access.

Answer (B) is correct.

The most difficult aspect of using Internet resources is locating the best information given the large number of information sources.

A . There is no limitation on the number access ports.

C . The only equipment required for accessing Internet resources is a computer, a modem, a telephone or other access line, and basic communication software.

D . Organizations routinely provide Internet access to their employees, and individuals can obtain access through individual subscription to commercial service providers.

Question: 28 Auditors often make use of computer programs that perform routine processing functions, such as sorting and merging. These programs are made available by computer companies and others and are specifically referred to as

- A. Compiler programs.
- B. Supervisory programs.
- C. Utility programs.
- D. User programs.

Answer (C) is correct.

Utility programs are provided by manufacturers of equipment to perform routine processing tasks required by both clients and auditors, such as extracting data, sorting, merging, and copying. Utility programs are pretested, are independent of the client's own programming efforts, and furnish useful information without the trouble of writing special programs for the engagement.

A . Compiler programs convert source programs written in a higher-level language into computer-readable object programs, i.e., into machine language.

B . Supervisory programs, also termed operating systems, are master programs responsible for controlling operations within a computer system.

D . User programs are those prepared for a particular application.

Question: 29 In general, mainframe or server production programs and data are adequately protected against unauthorized access. Certain utility software may, however, have privileged access to software and data. To compensate for the risk of unauthorized use of privileged software, IT management can

A. Prevent privileged software from being installed on the mainframe.

B. Restrict privileged access to test versions of applications.

C. Limit the use of privileged software.

D. Keep sensitive programs and data on an isolated machine.

Answer (C) is correct.

Since certain utility software may have privileged access to software and data stored on the mainframe or server, management must control the use of this utility software. Management should limit the use of this software to only those individuals with appropriate authority.

A . Privileged software may be needed to modify programs and data.

B . Privileged access may be necessary to modify the final versions of applications.

D . Authorized users must access sensitive programs and data through their workstations that are connected to the mainframe or server.

Question: 30 Which of the following technologies is specifically designed to exchange financial information over the World Wide Web?

A. Hypertext markup language (HTML).

B. Extensible business reporting language (XBRL).

C. Hypertext transfer protocol (HTTP).

D. Transmission control program/internet protocol (TCP/IP).

Answer (B) is correct.

XBRL is the specification developed for commercial and industrial entities. It is expected to decrease the costs of generating financial reports, reformulating information for different uses, and sharing business information using electronic media. The SEC allows firms to report using XBRL.

A . HTML is the authoring software language commonly used to create and link websites.

C . HTTP is the set of rules that allows hyperlinking across the Internet rather than on just a single computer.

D . TCP/IP is the suite of routing protocols that makes it possible to interconnect many devices from manufacturers all over the world through the Internet.

Question: 31 XML

A. Is focused on the content of the data.

B. Has become less important as new languages on the Internet are developed.

C. Uses standardized tags.

D. Is useful to display highly unstructured data.

Answer (A) is correct.

XML (eXtensible Markup Language) is useful for putting structured data into a text file. It can be used to extract and tag structured information from a database for transmission and subsequent use in other applications, e.g., display on the Internet or importation into a spreadsheet.

B . XML has become very popular for use on the Internet. Information tagged in XML can be integrated into HTML and other presentations.

C . XML is very flexible and allows the user to design customized (extensible) tags.

D . The data must conform to a structure to be properly tagged.

Question: 32 Using standard procedures developed by information center personnel, staff members download specific subsets of financial and operating data as they need it. The staff members analyze the data on their own personal computers and share results with each other. Over time, the staff members learn to modify the standard procedures to get subsets of financial and operating data that were not accessible through the original procedures. The greatest risk associated with this situation is that

A. The data obtained might be incomplete or lack currency.

B. The data definition might become outdated.

C. The server data might be corrupted by staff members' updates.

D. Repeated downloading might fill up storage space on staff members' personal computers.

Answer (A) is correct.

Staff members may not be aware of how often they need to download data to keep it current, or whether their queries, especially the ones they modified, obtain all the necessary information. Users may employ faulty parameters or logic. Poorly planned queries may also use computing resources inefficiently.

B . Downloading data does not affect the data definitions.

C . Staff members are downloading, not uploading, so the staff members are unlikely to corrupt server data.

D . The downloading procedures could replace previously downloaded files on the staff members' personal computers.

Question: 33 A firm is considering two possible computer configurations. System I would have a mainframe computer tied to 16 time-sharing terminals. System II would have a minicomputer tied to 16 intelligent workstations. Which of these two systems could be termed a "distributed system"?

A. System I only.

B. System II only.

C. Both Systems I and II.

D. Neither System I nor II.

Answer (B) is correct.

The advent of cheaper and smaller computers has permitted the development of a somewhat different alternative to centralization or decentralization: distributed data processing. In a distributed data processing system, the organization's processing needs are examined in their totality. The decision is not whether an application should be done centrally or locally, but rather which parts of the application are better performed by small local computers as intelligent terminals and which parts are better performed at some other, possibly centralized, site. In essence, the best distribution of processing tasks within application areas is sought. The key distinction between decentralized and distributed systems is the interconnection among the nodes (sites) in the latter kind of network. Hence, System I is a traditional system, and System II is a distributed system.

A . System I is a traditional centralized system.

C . Only System II is a distributed system.

D . System II is a distributed system.

Question: 34 A totally centralized system

- A. Is inherently less secure than a decentralized one.
- B. Is one that performs batch processing for subscribers.
- C. Accumulates and groups transactions for processing on a delayed basis.
- D. Is typical of older systems.

Answer (D) is correct.

Totally centralized systems are typical of older (mainframe) systems. Decentralization has been a consistent theme of processing arrangements since the 1980s.

- A . Centralization makes some security tasks easier.
- B . The batch processing performed for subscribers is a description of a service bureau.
- C . Accumulating and grouping transactions for processing on a delayed basis describes batch processing.

Question: 35 Today, organizations are using personal computers for data presentation because personal computer use compared to mainframe use is more

- A. Controllable.
- B. Conducive to data integrity.
- C. Reliable.
- D. Cost effective.

Answer (D) is correct.

In cooperative processing, personal computers are more cost effective than mainframes for data entry and presentation. They are better suited to frequent screen updating and graphical user interfaces.

- A . Personal computer use is less controllable than mainframe use.
- B . The difficulty of control in a personal computer environment threatens data integrity.
- C . Given their decades of refinement, mainframes are usually more reliable than personal computers.

Question: 36 An organization does business in seven states. Its offices maintain regional databases on their own computers, which are linked to the server at headquarters. Regional office computers periodically relay summarized data to the home-office, where they are used to update a corporate database. This organization uses a system known as

- A. Distributed data processing.
- B. Parallel-systems method.
- C. Inventory method.
- D. Strategic-planning system.

Answer (A) is correct.

A distributed data processing system maximizes the advantages of both centralized and decentralized systems. Each remote location has its own processing unit that is linked to a central server. The advantage is that processing tasks may be undertaken where they are best performed.

B . The parallel approach to systems conversion involves running both old and new systems until confidence in the new system is achieved, at which time the old system is discarded.

C . The inventory method is an immediate conversion from an old to a new system with no dual or parallel operating.

D . The strategic-planning system relates to the long-range planning used by top management.

Question: 37 Distributed computing systems provide several advantages over a centralized computer. Which of the following is not an advantage of distributed systems?

- A. Communications costs are usually lower.
- B. Alternate processing locations are available in case one site's computer is not functioning.
- C. Security measures are easier to provide.
- D. Investment in hardware is smaller for each site than for a central site.

Answer (C) is correct.

In a distributed system, a determination is made as to which parts of an application are best performed by small computers (e.g., intelligent terminals) and which should be performed at some other, possibly centralized, site. In other words, the best distribution of processing tasks among the interconnected nodes of the system is sought. Security therefore becomes more difficult when there are more sites to secure.

A . Lower communications costs are an advantage of distributed computing.

B . The availability of alternate processing locations is an advantage of distributed computing.

D . Given smaller, less complex hardware requirements, the cost for each site would be much less than for a central site.

Question: 38 Information processing made possible by a network of computers dispersed throughout an organization is called

- A. Online processing.
- B. Interactive processing.
- C. Time sharing.
- D. Distributed data processing.

Answer (D) is correct.

Distributed processing is characterized by a merger of computer and telecommunications technology. Distributed systems permit not only remote access to a computer but also the performance of local processing at local sites. The result is greater flexibility in systems design and the possibility of an optimal distribution of processing tasks.

A . Online processing is a method of processing data that permits both immediate posting (updating) and inquiry of master files as transactions occur.

B . Interactive processing is a method of processing data immediately upon input.

C . Time sharing is the processing of a program by the CPU until an input or output operation is required. In time sharing, the CPU spends a fixed amount of time on each program.

Question: 39 An organization has made available the company newsletter and job openings on the network such that only employees of the organization may view them. The organization is using a(n)

- A. Intranet.
- B. Extranet.
- C. Firewall.
- D. Client-server architecture.

Answer (A) is correct.

An intranet permits sharing of information throughout an organization by applying Internet connectivity standards and Web software (e.g., browsers) to the organization's internal network. An intranet addresses the connectivity problems faced by organizations that have many types of computers.

B . Use of an extranet is not limited to those within the organization.

C . A firewall is a security tool.

D . Client-server architecture refers to the physical and logical layout of the network, not its use.

Question: 40 Appropriate uses of an organization's internal communications network, or intranet, include all of the following except

- A. Making the human resources policy manual available to employees.
- B. Informing potential investors about company operations and financial results.
- C. Providing senior management with access to the executive support system.
- D. Enabling a project team that crosses departments to collaborate.

Answer (B) is correct.

An intranet permits sharing of information throughout an organization by applying Internet connectivity standards and Web software (e.g., browsers) to the organization's internal network. An intranet addresses the connectivity problems faced by organizations that have many types of computers. Its use is restricted to those within the organization.

A . Making the human resources policy manual available to employees is an appropriate use of an organization's internal communications network.

C . Providing senior management with access to the executive support system is an appropriate use of an organization's internal communications network.

D . Enabling a project team that crosses departments to collaborate is an appropriate use of an organization's internal communications network.

Question: 41 Which of the following areas experienced an increase in risk as personal computers replaced mainframe environments?

1. Backup and recovery
2. System incompatibility
3. Copyright violations

A. 1 only.

B. 2 only.

C. 2 and 3.

D. 1, 2, and 3.

Answer (D) is correct.

Personal computer users may be unaware of the need to make frequent file back-ups or lack the expertise or hardware to do so. Personal computer use also usually results in an increase in security concerns. Another increased risk pertains to copyright violations. Making unauthorized copies of

software is fairly easy and sometimes may be an informally accepted method of reducing software costs for personal computer systems.

- A . System incompatibility and possible copyright violations are also risks of personal computers.
- B . Inadequate backup and recovery and copyright violations are also risks of personal computers.
- C . The existence of inadequate backup and recovery procedures is also a common risk of personal computers.

Question: 42 Which of the following control risks is more likely with personal computers than in a mainframe environment with dedicated terminals?

- A. Copyright violations due to the use of unauthorized copies of purchased software.
- B. Applications written by one department that cannot share data with existing organization-wide systems.
- C. Lack of data availability due to inadequate data retention policies.
- D. All of the answers are correct.

Answer (D) is correct.

When personal computers are used, likely control risks include copyright violations that occur when unauthorized copies of software are made or software is installed on multiple computers; locally written applications that do not adhere to the organization's standards; and inadequate backup, recovery, and contingency planning.

- A . Copyright violations are a common risk with personal computers.
- B . Locally written applications that do not adhere to the organization's standards are a common risk with personal computers.
- C . Failure to follow proper backup procedures is a common risk with personal computers.

Question: 43 A distributed processing environment is most beneficial in which of the following situations?

- A. Large volumes of data are generated at many locations and fast access is required.
- B. Large volumes of data are generated centrally and fast access is not required.
- C. Small volumes of data are generated at many locations, fast access is required, and summaries of the data are needed promptly at a central site.
- D. Small volumes of data are generated centrally, fast access is required, and summaries are needed monthly at many locations.

Answer (A) is correct.

Distributed processing involves decentralizing processing tasks and data storage and assigning these functions to multiple computers, often in separate locations. Therefore, a situation in which large volumes of data are generated at many locations, with fast access being a necessity, would be benefited by a distributed processing environment.

B . Separate locations are not necessary if fast access to data is not required.

C . Distributed processing focuses on decentralizing processing tasks, so this method would be inappropriate for a situation requiring summaries at a central site.

D . The qualities of distributed processing would not lend themselves to small, centrally generated volumes of data.

Question: 44 Which of the following statements about desktop computers, servers, and mainframe computers is true?

A. Desktop computers usually cost more than servers but less than mainframes.

B. Because of the increased use of desktop computers, there will be little need for mainframes in the near future.

C. Servers must be programmed directly in machine language while mainframes use higher-level language.

D. The cost per transaction to process on each type of computer has decreased in recent years.

Answer (D) is correct.

Advances in technology have resulted in less expensive computers and increased computing power. The cost to process transactions on all kinds of computers has therefore decreased.

A . Desktop computers may cost less than US \$1,000. Relative to desktop computers, servers are more costly, more powerful, have more memory, and are able to interface with more peripheral equipment. Mainframes are large computers with many peripheral devices and large memories. There is virtually no upper limit on the cost of a mainframe.

B . Although desktop computers have become extremely popular, e.g., for word processing, databases, other business-related activities, and Internet use, large mainframes are still necessary for simulations and processing not possible on other smaller computers. Servers fill the gap between desktop and mainframe computers, particularly for use in networks.

C . All three computers ordinarily may be programmed in higher-level languages.

Question: 45 Which of the following is considered to be a server in a local area network (LAN)?

- A. The cabling that physically interconnects the nodes of the LAN.
- B. A device that stores program and data files for users of the LAN.
- C. A device that connects the LAN to other networks.
- D. A workstation that is dedicated to a single user on the LAN.

Answer (B) is correct.

A file server is a computer in a network that operates as a librarian. It stores programs and data files for users of the LAN and manages access to them.

- A . The cabling that interconnects the nodes of the LAN is the telecommunications link.
- C . A device that connects the LAN to other networks is a network gateway.
- D . A workstation dedicated to a single user of the LAN is a client.

Question: 46 Which of the following is a false statement about servers?

- A. A file server is a computer in a network that operates as a librarian.
- B. A server can provide access to databases and applications.
- C. A server consists of a hardware component only.
- D. An essential purpose of a server is resource sharing.

Answer (C) is correct.

A server provides access to network clients to databases or applications. It usually includes a software component. A server is more compact than a mainframe but is also conceptually different. It represents distributed information residing on networked servers. Servers and their software should be scalable. Adding memory or increasing processing speed should be possible.

- A . A file server is a librarian.
- B . A server accesses databases and applications.
- D . A server shares resources through a network.

Question: 47 Which of the following statements about the role and nature of servers is true?

- A. A server is a hardware component only.
- B. The use of servers makes increasing network capacity more difficult.
- C. Servers can provide clients access both to database and applications.

D. A server is like a mainframe computer but smaller.

Answer (C) is correct.

A server provides access to network clients to databases or applications. It usually includes a software component. A server is more compact than a mainframe but is also conceptually different. It represents distributed information residing on networked servers. Servers and their software should be scalable. Adding memory or increasing processing speed should be possible.

A . A server also has a software component.

B . A server-based system is scalable.

D . Mainframes performed all processing and data storage in one location.

Question: 48 A real estate brokerage firm is moving into a building that is already equipped with extensive telephone wiring. The firm is considering the installation of a digital private branch exchange (PBX) to connect computers and other office devices, such as copying machines, printers, and fax machines. A limitation of using a PBX-based system for this network is that

A. The firm would be dependent on others for system maintenance.

B. The system cannot easily handle large volumes of data.

C. Coaxial cabling would have to be installed throughout the building.

D. Relocating devices in the office would be difficult and expensive.

Answer (B) is correct.

A PBX has the advantage of using existing telephone lines and therefore not needing special wiring. Moreover, equipment can be moved without necessitating rewiring. However, because PBX-based systems use telephone wiring (most often copper wire), they cannot easily handle large volumes of data.

A . The company would be responsible for all maintenance of the equipment, although it could contract for service.

C . PBXs use telephone wiring. LANs typically require their own coaxial cabling.

D . PBX-based systems do not require rewiring when devices are moved.

Question: 49 Large organizations often have their own telecommunications networks for transmitting and receiving voice, data, and images. Very small organizations, however, are unlikely to be able to make the investment required for their own networks and are more likely to use

- A. Public switched lines.
- B. Fast-packet switches.
- C. Standard electronic mail systems.
- D. A WAN.

Answer (A) is correct.

Organizations can use public switched lines (phone lines) on a per-transmission basis. This option is the most cost-effective way for low-volume users to conduct telecommunications.

B . Fast-packet switches receive transmissions from various devices, break the data into packets, and route them over a network to their destination. They are typically installed by telecommunication utility companies and other large companies that have their own networks.

C . Electronic mail systems do not allow for voice transmissions.

D . Large organizations would use a wide area network.

Question: 50 A local area network (LAN) is best described as a(n)

- A. Computer system that connects computers of all sizes, workstations, terminals, and other devices within a limited proximity.
- B. System to allow computer users to meet and share ideas and information.
- C. Electronic library containing millions of items of data that can be reviewed, retrieved, and analyzed.
- D. Method to offer specialized software, hardware, and data-handling techniques that improve effectiveness and reduce costs.

Answer (A) is correct.

A LAN is a local distributed computer system, often housed within a single building. Computers, communication devices, and other equipment are linked by cable. Special software facilitates efficient data communication among the hardware devices.

B . A LAN is more than a system to allow computer users to share information. In addition, it is an interconnection of a computer system.

C . A LAN is not a library.

D . A LAN does not require specialized hardware.

Question: 51 Using a telecommunications provider affects in-house networks. To prepare for changes resulting from enhanced external network services, management should

- A. Optimize in-house networks to avoid bottlenecks that would limit the benefits offered by the telecommunications provider.
- B. Plan for rapid implementation of new capabilities in anticipation of ready acceptance of the new technology.
- C. Downsize the company's disaster recovery plan to recognize the increasing role of the telecommunications provider.
- D. Enhance the in-house network management to minimize dependence on the telecommunications provider for network management.

Answer (A) is correct.

To prepare the company for changes resulting from the enhanced external network services, management should take appropriate action. A number of bottlenecks may limit the benefits that can be derived from the external network. Furthermore, applications, systems software, and communications protocols must be able to process information in a format and in a manner acceptable to end users.

B . Resistance to change, inflexible organizational structures, and skepticism about the technology should be expected and must be successfully managed if the company is to reap the benefits.

C . A company's disaster recovery plan should be enhanced to ensure the reliability of the network.

D . Network management may now be primarily a function, yet it will become more of a partnership arrangement with the communications carrier.

Question: 52 Which of the following represents the greatest exposure to the integrity of electronic funds transfer data transmitted from a remote terminal?

- A. Poor physical access controls over the data center.
- B. Network viruses.
- C. Poor system documentation.
- D. Leased telephone circuits.

Answer (D) is correct.

Leased telephone circuits represent a direct exposure to the risk of breached data integrity. They use public lines that can be easily identified and tapped.

A . Poor physical access controls represent a secondary exposure for compromise of remote data communications lines.

B . Network viruses represent a secondary exposure for compromise of remote data communications lines.

C . Poor system documentation represent a secondary exposure for compromise of remote data communications lines.

Question: 53 Which of the following networks provides the least secure means of data transmission?

A. Value-added.

B. Public-switched.

C. Local area.

D. Private.

Answer (B) is correct.

Public-switched networks are wide area networks that use public telephone lines. This arrangement may be the most economical, but data transmission may be of lower quality, no connection may be available, and security measures may be ineffective.

A . Value-added carriers provide data security and error detection and correction procedures.

C . Local area networks inherently limit data transmission exposures.

D . Private networks provide security through limited access and dedicated facilities.

Question: 54 A type of network that is used to support interconnections within a building is known as a

A. Local area network.

B. Wide area network.

C. Metropolitan area network.

D. Value-added network.

Answer (A) is correct.

A communication network consists of one or more computers and their peripheral equipment linked together. Local area networks (LANs) link together hardware and other equipment within a limited area such as a building so that users can share data and hardware devices.

B . Wide area networks consist of a conglomerate of LANs over widely separated locations.

C . A metropolitan area network connects devices across an urban area.

D . A value-added network is a type of privately owned WAN.

Question: 55 An electronic meeting conducted between several parties at remote sites is referred to as

A. Teleprocessing.

B. Interactive processing.

C. Telecommuting.

D. Teleconferencing.

Answer (D) is correct.

Conducting an electronic meeting among several parties at remote sites is teleconferencing. It can be accomplished by telephone or electronic mail group communication software. Videoconferencing permits the conferees to see each other on video screens. The practice has grown in recent years as companies have attempted to cut their travel costs.

A . Teleprocessing refers to connections in an online system.

B . Interactive processing allows users to converse directly with the system. It requires online processing and direct access to stored information.

C . Telecommuting refers to the practice of individuals working out of their homes by communicating with their office via the computer.

Question: 56 Which of the following statements about voice communications is true?

A. Modern voice recognition input devices have large vocabularies and short training periods.

B. A voice output device converts speech into digital data.

C. Cell phones and PCS services use the same frequency radio waves.

D. Pagers can alert users to the receipt of messages but cannot transmit text.

Answer (A) is correct.

Voice recognition input devices provide an alternative to keyboard input. These systems compare the speaker's voice patterns with prerecorded patterns. Advanced systems now have large vocabularies and shorter training periods. They allow for dictation and are not limited to simple commands.

B . A voice output device converts digital data into speech using prerecorded sounds.

C . PCS services use lower-power, higher-frequency radio waves than cell phones.

D . Newer pager systems permit transmission of text messages.

Question: 57 When two devices in a data communications system are communicating, there must be agreement as to how both data and control information are to be packaged and interpreted. Which of the following terms is commonly used to describe this type of agreement?

- A. Asynchronous communication.
- B. Synchronous communication.
- C. Communication channel.
- D. Communication protocol.

Answer (D) is correct.

A protocol is a set of formal rules or conventions governing communication between a sending and a receiving device. It prescribes the manner by which data are transmitted between these communications devices. In essence, a protocol is the envelope within which each message is transmitted throughout a data communications network.

A . Asynchronous communication is a mode of transmission. Communication is in disjointed segments, typically character by character, preceded by a start code and ended by a stop code.

B . Synchronous communication is a mode of transmission in which a continuous stream of blocks of characters result in faster communications.

C . A communication channel is a transmission link between devices in a network. The term is also used for a small processor that controls input-output devices.

Question: 58 Which of the following is false with respect to client-server networks?

- A. A client-server network divides processing of an application between a client machine on a network and a server.
- B. In a client-server network, many applications reside on the client computer.
- C. The server customarily manages peripheral hardware and controls access to shared databases.
- D. A client-server network can cope with only 12 or fewer clients at a time.

Answer (D) is correct.

A client-server network can cope with thousands of clients at a time. They can access the server over the Internet from anywhere at any time with no time-related charges.

A . It is a true statement about client-server networks.

B . It is a true statement about client-server networks.

C . It is a true statement about client-server networks.

Question: 59 If a system does not have a mainframe computer or a file server but does processing within a series of personal computers, the network is a(n)

A. Offline processing system.

B. Expert system.

C. Direct access system.

D. Peer-to-peer system.

Answer (D) is correct.

A local area network is a user-controlled network that operates without the assistance of a common carrier. It can have several personal computers attached to a host computer, can be linked as part of several LANs that may or may not communicate with a host computer, or can be connected together but not connected to a host computer (stand alone). A peer-to-peer network operates without a mainframe or file server.

A . Offline processing occurs when devices are not directly connected to the computer.

B . Expert systems are information systems that provide diagnostic and problem solving through the use of structured software and expert experience.

C . Direct access refers to the method for storing and retrieving data within a database.

Question: 60 Response time on a local area network (LAN) was so slow that programmers working on applications kept their code on their own workstations rather than on the server. As a result, daily backups of the server did not contain the current source code. The best approach to detect deteriorating response time is

A. Parallel testing.

B. Integrated test facility.

C. Performance monitoring.

D. Program code comparison software.

Answer (C) is correct.

Performance monitoring is the systematic measurement and evaluation of operating results such as transaction rates, response times, and incidence of error conditions. Performance monitoring will reveal

trends in capacity usage so that capacity can be upgraded before response deteriorates to the point that users behave in unintended or undesirable ways.

- A . Parallel testing is an approach to implementing a new system.
- B . An ITF is an audit tool that uses a fictitious entity against which data transactions are processed.
- D . Program code comparison software is used to detect unauthorized changes in programs.

Question: 61 A device used to connect dissimilar networks is a

- A. Gateway.
- B. Bridge.
- C. Router.
- D. Wiring concentrator.

Answer (A) is correct.

A gateway, often implemented via software, translates between two or more different protocol families and makes connections between dissimilar networks possible.

- B . A bridge joins two similar network segments so that they appear to be one physical segment.
- C . A router connects two or more network segments, such that the segments maintain their separate logical identities.
- D . A wiring concentrator accepts twisted-pair cabling from each of several personal computers in the same local area network (LAN).

Question: 62 A control feature designed to negate the use of utility programs to read files that contain all authorized access user codes for the network is

- A. Internally encrypted passwords.
- B. A password hierarchy.
- C. Log-on passwords.
- D. A peer-to-peer network.

Answer (A) is correct.

Utility programs can be used to gain access to almost any file. However, gaining access to a file of passwords would be useless if those passwords were encrypted prior to placing them in the file.

- B . The utility program could gain access to all passwords in the file, regardless of the hierarchy.

- C . If the user has access to utility programs, (s)he already has access (is logged on) to the system.
- D . A peer-to-peer network relates to connectivity of similar networks.

Question: 63 The network signaling technology that makes the Internet possible is

- A. Switching.
- B. Routing.
- C. Bridging.
- D. Ethernet.

Answer (B) is correct.

Routers are highly intelligent networking devices that have tables stored in memory that tell them the most efficient path along which each transmitted data packet should be sent. Routing is what makes the Internet possible.

- A . Switching does not have the addressing sophistication to support the kind of global traffic required by the Internet.
- C . Bridges are networking devices that improve traffic flow on local area networks (LANs) by dividing the network into segments.
- D . Ethernet is a LAN transmission protocol.

Question: 64 The transmission protocol underlying the Internet is known as

- A. TCP/IP.
- B. Bluetooth.
- C. WAN.
- D. Ethernet.

Answer (A) is correct.

Transmission Control Protocol/Internet Protocol (TCP/IP) is the suite of routing protocols that makes it possible to interconnect many thousands of devices from dozens of manufacturers all over the world through the Internet. IP addressing (also called dotted decimal addressing) is the heart of Internet routing. It allows any device anywhere in the world to be recognized on the Internet through the use of a standard-format IP address.

- B . Bluetooth is a wireless transmission protocol that operates over a radius of about 30 feet.
- C . WAN (wide area network) is a networking design architecture, not a transmission protocol.

D . Ethernet is a LAN transmission protocol.

Question: 65 Which of the following concepts is not specifically associated with the Internet?

- A. Bluetooth.
- B. TCP/IP.
- C. HTML.
- D. URL.

Answer (A) is correct.

Bluetooth is a wireless transmission protocol not specific to the Internet.

B . TCP/IP (Transmission Control Protocol/Internet Protocol) is the suite of routing protocols that makes the Internet possible.

C . HTML (Hypertext Markup Language) is a standardized language that allows anyone to create a page on the Web (which is part of the Internet).

D . A URL (Uniform Resource Locator) is a string of alphanumeric characters, periods, and forward slashes that uniquely identifies every resource on the Web (which is part of the Internet).

Question: 66 Which of the following statements is true regarding Transmission Control Protocol and Internet Protocol (TCP/IP)?

- A. Every TCP/IP-supported transmission is an exchange of funds.
- B. TCP/IP networks are limited to large mainframe computers.
- C. Every site connected to a TCP/IP network has a unique address.
- D. The actual physical connections among the various networks are limited to TCP/IP ports.

Answer (C) is correct.

TCP/IP is a suite of communications protocols used to connect computers to the Internet. It is also built into network operating systems. It is the foundation of the Internet protocol as well as numerous other commercial protocols. Every site connected to a TCP/IP network has a unique address.

A . TCP/IP supports numerous transmissions, not just those involving the exchange of funds.

B . TCP/IP networks can be accessed from both personal computers and large mainframe computers.

D . The physical connections are accessed by the data link connections, which in turn are accessible by numerous network and transport protocols.

Question: 67 Securing client-server systems is a complex task because of all of the following factors except

- A. The use of relational databases.
- B. The number of access points.
- C. Concurrent operation of multiple-user sessions.
- D. Widespread data access and update capabilities.

Answer (A) is correct.

Client-server systems do not necessarily use relational databases.

- B . The existence of multiple access points makes security more complicated in client-server environments.
- C . Users may access the network at the same time.
- D . Client-server security becomes complex when many users can update information.

Question: 68 A national retailer required more detailed data to help stock its stores with the right products and to increase its turnover. Such data amounted to several gigabytes per day from each store. A new high-speed company-wide network was needed to transmit and analyze the data. The company wanted the features, functionality, and control of a sophisticated voice and data network without the cost of the components or the staff to maintain it. Which of the following options would be most suitable?

- A. Private wide-area network.
- B. Local area network.
- C. Value-added network.
- D. Virtual private network.

Answer (D) is correct.

A virtual private network is a carrier-provided service in which the public-switched network provides capabilities similar to those of dedicated private lines but at a lower cost. In effect, an unlimited number of virtual networks can be created from the single common physical network. Virtual networks are made possible by intelligent networking technology, which provides the means for routing telephone calls over the best paths without dedicated lines.

- A . A private wide-area network is one that an individual business firm maintains for its own use.

B . A local area network would lack the capacity (bandwidth) to carry large amounts of data at a very high speed.

C . A value-added network is a data-only, multipath, third-party-managed network.

Question: 69 Kelly Corporation needs an internal communication network that provides high speed communication among nodes. Which of the following is appropriate for Kelly?

A. Wide area network (WAN).

B. Local area network (LAN).

C. File server.

D. Value-added network (VAN).

Answer (B) is correct.

Local area networks are privately owned networks that provide high-speed communication among nodes. They are usually restricted to limited areas, such as a particular floor of an office building.

A . Wide area networks provide lower-speed communication, owing to them being spread out among larger areas than LANs.

C . A file server is hardware that acts as an access control mechanism in a local area network.

D . A VAN is a privately owned telecommunications carrier that provides capacity to outside users. It does not provide high-speed communication among nodes.

Question: 70 Which one of the following network configurations is distinguished by the possibility of spreading the cost of ownership among multiple organizations?

A. Value-added network.

B. Baseband network.

C. Wide area network.

D. Local area network.

Answer (C) is correct.

Wide area networks consist of a conglomerate of local area networks (LANs) over widely separated locations. The key aspect here is that a WAN can be either publicly or privately owned.

A . A value-added network is a private network.

B . Baseband refers to the signal-carrying capacity of a network, not the ownership of its hardware devices.

D . All the equipment in a local area network (LAN) is owned by one organization.

Question: 71 The most distinguishing feature of the use of a client-server processing model over an old mainframe configuration is

- A. Digital processing over analog.
- B. Less need for data backup.
- C. Decentralization over centralization.
- D. Ability to connect remote locations.

Answer (C) is correct.

Mainframes were arranged so that all processing and data storage was done in a single, central location. Improvements in technology have led to increasing decentralization of information processing. The most cost-effective and easy-to-administer arrangement for local area networks (LANs) uses the client-server model.

- A . Both client-server configurations and mainframes use digital processing.
- B . Both client-server configurations and mainframes must employ data backup.
- D . Mainframes were able to connect to users in remote locations.

Question: 72 Which of the following is the primary advantage of using a value-added network (VAN)?

- A. It provides confidentiality for data transmitted over the Internet.
- B. It provides increased security for data transmissions.
- C. It is more cost effective for the company than transmitting data over the Internet.
- D. It enables the company to obtain trend information on data transmissions.

Answer (B) is correct.

VANs are private networks that provide their customers with reliable, high-speed, secure transmission of data.

- A . VANs are private networks.
- C . A disadvantage of VANs is that they are more expensive than transmitting data over the Internet.
- D . Obtaining trend information on data transmissions is not the primary advantage of VANs.

Question: 73 Which of the following solutions creates an encrypted communication tunnel across the Internet for the purpose of allowing a remote user secure access into the network?

- A. Packet-switched network.
- B. Digital encryption.
- C. Authority certificate.
- D. Virtual private network.

Answer (D) is correct.

A virtual private network (VPN) connects remote users to a local Internet service provider and routes data through the public Internet. The data is secured by encryption while in transit.

A . In packet switching, the data bits making up a message are broken up into packets of predefined length. The packets are then transmitted across a WAN.

B . Digital encryption is the process of encoding data prior to transmission. The data is then decoded by the recipient.

C . A certificate authority is an entity that issues digital certificates. It does not create an encrypted communication tunnel across the Internet.

Question: 74 Most client-server applications operate on a three-tiered architecture consisting of which of the following layers?

- A. Desktop client, application, and database.
- B. Desktop client, software, and hardware.
- C. Desktop server, application, and database.
- D. Desktop server, software, and hardware.

Answer (A) is correct.

A client-server system divides processing of an application between a client machine on a network and a server. This division depends on which tasks each is best suited to perform. User interaction is ordinarily restricted to the client part of the application. This portion normally consists of the user interface, data entry, queries, and receipt of reports. Moreover, many applications, e.g., word processing and spreadsheet software, reside on the client computer (a desktop, workstation, or laptop). The server customarily manages peripheral hardware and controls access to shared databases. Thus, a client-server application must be designed as separate software components that run on different machines but appear to be one application.

B . The database is a layer in the architecture.

C . The desktop client is a layer in the architecture.

D . The desktop client and the database are layers in the architecture.

Question: 75 A value-added network (VAN) is a privately owned network that performs which of the following functions?

- A. Routes data transactions between trading partners.
- B. Routes data within a company's multiple networks.
- C. Reports on the latest developments within the client's industry.
- D. Provides services for sending marketing data to customers.

Answer (A) is correct.

Value-added networks (VANs) are private networks that provide their customers with reliable, high-speed, secure transmission of data. To compete with the Internet, these third-party networks add value by providing their customers with error detection and correction services, electronic mailbox facilities for EDI purposes, EDI translation, and security for email and data transmissions.

B . A value-added network transmits data between the networks of different entities, not a single entity's networks.

C . A value-added network provides data transmission services, not information other than that sent by clients and their trading partners.

Question: 76 What technology is needed in order to convert a paper document into a computer file?

- A. Optical character recognition.
- B. Electronic data interchange.
- C. Bar-code scanning.
- D. Joining and merging.

Answer (A) is correct.

Optical character recognition (OCR) is a method of scanning printed documents and saving them to a digital storage medium.

B . Electronic data interchange (EDI) is the communication of electronic documents directly from a computer in one organization to a computer in another organization, for example, to order goods from a supplier or to transfer funds.

C . Bar coding is appropriate to the tracking of physical goods, not to the conversion of paper documents.

D . Joining and merging are actions performed on database tables.

Question: 77 Utility programs can be used to read files that contain all authorized access user codes for a server. A control to prevent this is

- A. Internally encrypted passwords.
- B. A password hierarchy.
- C. Log-on passwords.
- D. A peer-to-peer network.

Answer (A) is correct.

If passwords are internally encrypted, even a user of a powerful utility program will not be able to read them.

B . A password hierarchy can control the actions (read, write, add, delete, etc.) that can be performed on certain data elements, but it cannot prevent a utility program from reading a file of access codes.

C . Log-on passwords can only prevent unauthorized users from entering the system.

D . Peer-to-peer is a type of network topology; it is not a security arrangement.

Question: 78 A metropolitan area network (MAN)

- A. Connects devices in two or more office parks in one urban area.
- B. Connects devices within a single office or home or among buildings in an office park.
- C. Consists of a group of LANs operating over widely separated locations.
- D. Is the electronic transfer of documents between businesses.

Answer (A) is correct.

A MAN connects multiple sites with multiple workstations for shared use of common resources. Thus, it connects devices in an urban area, e.g., two or more office parks.

B . A local area network (LAN) connects devices within a single office or home or among buildings in an office park.

C . A wide area network (WAN) consists of a group of LANs operating over widely separated locations.

D . Electronic data interchange (EDI) is the electronic transfer of documents between businesses.

Question: 79 Which of the following is a true statement about voice communication?

- A. If an organization's network is not configured optimally, the VoIP could slow the network.
- B. VoIP uses circuit switching over the telephone lines rather than packet switching over the Internet.
- C. A voice input device converts digital data into speech using prerecorded sounds.
- D. Teleconferencing permits the conferees to see each other on video screens.

Answer (A) is correct.

Voice over Internet protocol (VoIP) uses packet switching over the Internet rather than circuit switching over telephone lines. If the network is not configured optimally, the technology could slow the network.

- B . VoIP, also called Internet telephony, uses packet switching over Internet, not over telephone lines.
- C . A voice output device, not an input device, converts digital data into speech using prerecorded sounds.
- D . Videoconferencing, not teleconferencing, permits the conferees to see each other on video screens.

Question: 80 A system that has several computers connected for communication and data transmission purposes but also enables each computer to process its own data is known as a

- A. Distributed network.
- B. Centralized network.
- C. Outsourced network.
- D. Multidrop network.

Answer (A) is correct.

A distributed network connects multiple computers for communication and data transmission and also enables each connected computer to process its own data.

- B . In a centralized network, processing occurs in one location.
- C . Outsourced services are purchased from a provider.
- D . A multidrop network provides links for each terminal to a single communications line connected to a central processing unit; only one terminal can send or receive messages at a time.

Question: 81 Which of the following statements about operating systems is true?

- A. An operating system is a set of instructions that controls a computer or a communication network.

- B. An operating system is a link to a system that allows users to use icons rather than command words to initiate processing.
- C. An operating system is a set of instructions that directs a computer to perform certain tasks and produce certain results.
- D. An operating system is a combination of programs that coordinates the actions of a computer, including its peripheral devices and memory.

Answer (D) is correct.

Systems software performs the fundamental tasks needed to manage computer resources. The most basic piece of systems software is the operating system. An operating system is an interface among users, application software, and the computer's hardware (CPU, disk drives, printers, communications devices, etc.).

- A . This is not a true statement about operating systems.
- B . A graphical user interface is a link to a system that allows users to use icons rather than command words to initiate processing.
- C . A computer program is a set of instructions that directs a computer to perform certain tasks and produce certain results.

Question: 82 Which of the following would be the most appropriate starting point for a compliance evaluation of software licensing requirements for an organization with more than 15,000 computer workstations?

- A. Determine if software installation is controlled centrally or distributed throughout the organization.
- B. Determine what software packages have been installed on the organization's computers and the number of each package installed.
- C. Determine how many copies of each software package have been purchased by the organization.
- D. Determine what mechanisms have been installed for monitoring software usage.

Answer (A) is correct.

The logical starting point is to determine the point(s) of control. Evidence of license compliance can then be assessed. For example, to shorten the installation time for revised software in a network, an organization may implement electronic software distribution (ESD), which is the computer-to-computer installation of software on workstations. Instead of weeks, software distribution can be accomplished in hours or days and can be controlled centrally. Another advantage of ESD is that it permits tracking or metering of PC program licenses.

B . Before taking this step, an auditor should first determine whether installation is controlled centrally. This determination affects how the auditor will gather information about the installed software.

C . This procedure helps an auditor determine whether software was legitimately purchased. However, a better starting point is determining where the software is installed.

D . Monitoring usage is not as important as determining installation procedures when evaluating licensing compliance.

Question: 83 Use of unlicensed software in an organization

1. Increases the risk of introducing viruses into the organization
2. Is not a serious exposure if only low-cost software is involved
3. Can be detected by software checking routines that run from a network server

A. 1 only.

B. 1 and 2 only.

C. 1, 2, and 3.

D. 1 and 3 only.

Answer (D) is correct.

Antivirus measures should include strict adherence to software acquisition policies. Unlicensed software is less likely to have come from reputable vendors and to have been carefully tested. Special software is available to test software in use to determine whether it has been authorized.

A . Use of unlicensed software increases the risk of viral infection, and its use can be detected by software checking routines. Moreover, the cost of the software is not relevant. Any software may contain a virus.

B . Use of unlicensed software increases the risk of viral infection, and its use can be detected by software checking routines. Moreover, the cost of the software is not relevant. Any software may contain a virus.

C . Use of unlicensed software increases the risk of viral infection, and its use can be detected by software checking routines. Moreover, the cost of the software is not relevant. Any software may contain a virus.

Question: 84 When changes are made in operating systems, which of the following should be performed?

1. Making backout plans and implementing changes in offhours.
2. Performing the changed program in a sandbox area first.
3. Logging all changes.
4. Making certain that systems analysts programmed applications correctly.

- A. 1 only.
- B. 1 and 3 only.
- C. 2, 3, and 4 only.
- D. 1, 2, and 3 only.

Answer (D) is correct.

When changes are made in operating systems, controls include (1) segregation of duties, (2) testing the system before use, (3) making backout plans, (4) implementing changes in offhours, and (5) logging all changes. But system analysts should not be allowed to perform applications programming or have other access to data center operations, data, or production programs.

A . The appropriate procedures also include performing the changed program in a sandbox area first and logging all changes.

B . The appropriate procedures also include performing the changed program in a sandbox area first.

C . An appropriate segregation of duties includes not allowing systems analysts to access applications.

Question: 85 During the preliminary survey for an audit of one of an organization's manufacturing plants, an auditor discovers that the plant experiences production problems with costs far in excess of those budgeted and with finished goods inventory levels that are clearly excessive. Which of the following management control procedures would have best brought the problems to management's attention earlier?

A. Implementing standard costing procedures at each plant, with a summary of variances reported to management on a weekly basis.

B. Establishing perpetual inventory control procedures at each plant, with a report detailing any inventory items with levels in excess of two weeks' production provided to management on a weekly basis.

C. Planning monthly production based on management forecasts, with a report comparing actual production with forecasted production and actual costs with budgeted costs provided to management on a weekly basis.

D. Comparing actual sales with forecasted sales and budgeted gross margin with actual gross margin, with a report provided to management on a weekly basis.

Answer (C) is correct.

Comparing actual production with management forecasts detects whether finished goods inventory is excessive, and comparing actual costs with budgeted costs detects unfavorable cost variances.

A . Standard costing detects unfavorable cost variances but not excess finished goods inventory.

B . Perpetual inventory control procedures detect excess finished goods inventory but not unfavorable cost variances.

D . Because cost of goods sold is a component of gross margin, comparing actual and budgeted sales and actual and budgeted gross margin procedures may detect unfavorable cost variances, not excess finished goods inventory.

Question: 86 Which of the following terms best describes a payroll system?

A. Database management system (DBMS).

B. Transaction processing system (TPS).

C. Decision support system (DSS).

D. Enterprise resource planning (ERP) system.

Answer (B) is correct.

Information systems that support routine processes in an organization include, among others, the transaction processing system (TPS). A transaction is a single, discrete event that can be captured by an information system. A TPS therefore captures the fundamental data that reflect the economic life of an organization. A payroll system is one of the most routine processes necessary to conduct the organization's business.

A . A DBMS is an integrated set of software tools superimposed on the data files that helps maintain the integrity of the underlying database.

C . A DSS is an interactive system that is useful in solving semistructured problems, that is, those with a structured portion (which the computer can solve) and an unstructured portion (which requires the manager's insight and judgment).

D . An ERP system is the latest phase in the development of computerized systems for managing organizational resources. ERP is intended to integrate enterprise-wide information systems by creating one database linked to all of an organization's applications.

Question: 87 How is an accounting information system (AIS) distinguished from a management information system (MIS)?

- A. An AIS deals with financial information; a MIS handles all other information.
- B. An AIS may be either manual or computer based; a MIS is computer based.
- C. An AIS is a subsystem within a MIS.
- D. An AIS is control oriented; a MIS is used exclusively for planning.

Answer (C) is correct.

An information system transforms raw data into knowledge useful for decision making. A MIS provides information for management decisions. An AIS is a subsystem of a MIS and processes financial and transactional data relevant to managerial decisions as well as financial accounting.

- A . An AIS provides financial information; a MIS is not limited to financial information, but does handle it.
- B . An AIS is a subsystem within a MIS which is an integrated user-machine system that includes computer hardware and software.
- D . Both types of systems are used to provide a wide range of information to management.

Question: 88 An accounting information system (AIS) must include certain source documents in order to control purchasing and accounts payable. For a manufacturing organization, the best set of documents should include

- A. Purchase requisitions, purchase orders, inventory reports of goods needed, and vendor invoices.
- B. Purchase orders, receiving reports, and inventory reports of goods needed.
- C. Purchase orders, receiving reports, and vendor invoices.
- D. Purchase requisitions, purchase orders, receiving reports, and vendor invoices.

Answer (D) is correct.

An AIS is a subsystem of a management information system that processes financial and transactional data relevant to managerial and financial accounting. The AIS supports operations by collecting and sorting data about an organization's transactions. An AIS is concerned not only with external parties but also with the internal activities needed for management decision making at all levels. An AIS is best suited to solve problems when reporting requirements are well defined. A manufacturer has well-defined reporting needs for routine information about purchasing and payables. Purchase requisitions document user department needs, and purchase orders provide evidence that purchase transactions were appropriately authorized. A formal receiving procedure segregates the purchasing and receiving

functions and establishes the quantity, quality, and timeliness of goods received. Vendor invoices establish the liability for payment and should be compared with the foregoing documents.

- A . Receiving reports should be included.
- B . Requisitions and vendor invoices should be included.
- C . Purchase requisitions should be included.

Question: 89 Which one of the following statements about an accounting information system (AIS) is false?

- A. AIS supports day-to-day operations by collecting and sorting data about an organization's transactions.
- B. The information produced by AIS is made available to all levels of management for use in planning and controlling an organization's activities.
- C. AIS is best suited to solve problems where there is great uncertainty and ill-defined reporting requirements.
- D. AIS is often referred to as a transaction processing system.

Answer (C) is correct.

An AIS is a subsystem of a management information system that processes financial and transactional data relevant to managerial and financial accounting. The AIS supports operations by collecting and sorting data about an organization's transactions. An AIS is concerned not only with external parties, but also with the internal activities needed for management decision making at all levels. An AIS is best suited to solve problems when reporting requirements are well defined. A decision support system is a better choice for problems in which decision making is less structured.

- A . It is an attribute of an AIS.
- B . It is an attribute of an AIS.
- D . It is an attribute of an AIS.

Question: 90 Which one of the following features is least likely to apply to the transaction processing cycle of an accounting information system?

- A. Data records are chiefly historical in nature.
- B. Most of the sources of data are an organization's recurring transactions.
- C. Data are usually financial in nature.
- D. Data records are the basis of predictive systems.

Answer (D) is correct.

An AIS is a subsystem of a management information system that processes financial and transactional data relevant to managerial and financial accounting. The AIS supports operations by collecting and sorting historical data about an organization's transactions. An AIS is concerned not only with external parties but also with the internal activities needed for management decision making at all levels. An AIS is best suited to solve problems when reporting requirements are well defined. An AIS does not typically use records based on predictive systems, which would be a feature of a decision support system.

A . It is a feature commonly associated with an AIS.

B . It is a feature commonly associated with an AIS.

C . It is a feature commonly associated with an AIS.

Question: 91 Which one of the following distinguishes a management information system from a transaction processing system?

- A. Maintenance of a structured database.
- B. Capability to provide data for decision-making support.
- C. Automation of routine transaction processing.
- D. Production of reports to support operations.

Answer (B) is correct.

A management information system (MIS) provides managers with the information they need for analysis, planning, control, and decision making. A transaction processing system (TPS) supports the ongoing routine operations of an organization.

A . A database is an essential part of the routine processing performed by a data processing system.

C . The automation of routine transaction processing is a central feature of a transaction processing system.

D . The production of reports to support operations is a central feature of a transaction processing system.

Question: 92 Management information systems represent a significant investment by most businesses. A primary concern of management is that the system

- A. Meet the business needs of the organization.
- B. Employ the latest technology.
- C. Might consume too much time and money during testing.

D. Was designed using CASE (Computer-Aided Software Engineering) tools rather than traditional methods.

Answer (A) is correct.

A management information system (MIS) provides information for management decisions. The MIS must meet the needs of the organization or the cost will exceed any benefit to a business.

B . While all organizations desire to use the latest technology that can be economically justified, this was not listed as a concern of management related to MIS success.

C . While testing is time consuming and expensive, it was not listed as a concern of management related to MIS success.

D . Use of CASE tools usually improves the chances of success instead of increasing risk.

Question: 93 Which one of the following statements about a management information system (MIS) is false?

A. A MIS supports day-to-day operations by aggregating and formatting data about an organization's transactions.

B. The information produced by a MIS is made available to middle management for use in controlling an organization's activities.

C. A MIS is best suited to solve problems when uncertainty is great and reporting requirements are ill-defined.

D. A MIS is often fed with input by a transaction processing system.

Answer (C) is correct.

A MIS is a system that supports routine processes. It typically receives input from a transaction processing system, aggregates it, then reports it in a format useful to middle management in running the business. A MIS is concerned not only with reporting to external parties, but also with the internal activities needed for management decision making. A MIS is best suited to solve problems when reporting requirements are well defined. A decision support system is a better choice for problems in which decision making is less structured.

A . A MIS supports day-to-day operations by aggregating and formatting data about an organization's transactions.

B . The information produced by a MIS is made available to middle management for use in controlling an organization's activities.

D . A MIS is often fed with input by a transaction processing system.

Question: 94 A client would like to implement a management information system that integrates all functional areas within an organization to allow information exchange and collaboration among all parties involved in business operations. Which of the following systems is most effective for this application?

- A. A decision support system.
- B. An executive support system.
- C. An office automation system.
- D. An enterprise resource planning system.

Answer (D) is correct.

Enterprise Resource Planning (ERP) is the latest phase in the development of computerized systems for managing organizational resources. ERP is intended to integrate enterprise-wide information systems by creating one database linked to all of an organization's applications.

A . A decision support system is an interactive system that is useful in solving semistructured problems, that is, those with a structured portion (that a computer can solve) and an unstructured portion (that requires the manager's insight and judgment).

B . ESS has been replaced by business intelligence. BI gives upper management the information it needs to know where the organization is and how to steer it in the intended direction.

C . Office automation systems include the familiar word processing, spreadsheet, digital document storage, and desktop publishing applications of most office workers.

Question: 95 The fixed assets and related depreciation of a company are currently tracked on a password-protected spreadsheet. The information technology governance committee is designing a new enterprise-wide system and needs to determine whether the current fixed asset process should be included because the current system seems to be working properly. What long-term solution should the committee recommend?

- A. Continuing to use the current spreadsheet process because there have been no issues in this area.
- B. Developing a new fixed-asset system to manage the assets and related depreciation.
- C. Purchasing a stand-alone fixed asset program for managing the assets and related depreciation.
- D. Adopting the fixed-asset module of the new system for integration.

Answer (D) is correct.

Adopting a fully integrated fixed-asset module for the new system is the best long-term solution.

A . The decision to move forward with an enterprise-wide system has already been made. Choosing to stay with an outdated stand-alone system that does not integrate with an enterprise-wide system would not be a good recommendation.

B . Developing a new fixed-asset system would not be the best use of resources. The decision has already been made to move forward with an enterprise-wide system.

C . The decision to move forward with an enterprise-wide system has already been made. Purchasing a new stand-alone fixed-asset program that does not integrate with the enterprise-wide system is not the best recommendation.

Question: 96 A principal advantage of an ERP system is

- A. Program-data dependence.
- B. Data redundancy.
- C. Separate data updating for different functions.
- D. Centralization of data.

Answer (D) is correct.

ERP integrates enterprise-wide information systems by creating one database linked to all of an organization's applications, resulting in the centralization of data.

A . An ERP system uses a central database and a database management system. A fundamental characteristic of a database is that applications are independent of the physical structure of the database. Writing programs or designing applications to use the database requires only the names of desired data items, not their locations.

B . An ERP system eliminates data redundancy.

C . An ERP system is characterized by one-time data updating for all organizational functions.

Question: 97 In a traditional ERP system, the receipt of a customer order may result in

1. Customer tracking of the order's progress
2. Automatic issue of a purchase order
3. Hiring or reassigning of employees
4. Automatic adjustment of output schedules

- A. 2, 3, and 4 only.
- B. 1 and 3 only.
- C. 3 and 4 only.

D. 1, 2, 3, and 4.

Answer (A) is correct.

The traditional ERP system is one in which subsystems share data and coordinate their activities. Thus, if marketing receives an order it can quickly verify that inventory is sufficient to notify shipping to process the order. Otherwise, production is notified to manufacture more of the product with a consequent automatic adjustment of output schedules. If materials are inadequate for this purpose the system will issue a purchase order. If more labor is needed human resources will be instructed to reassign or hire employees. However, the subsystems in a traditional ERP system are internal to the organization. Hence, they are often called back-office functions. The information produced is principally (but not exclusively) intended for internal use by the organization's managers.

The current generation of ERP software (ERP II) has added front-office functions. Consequently, ERP II, but not traditional ERP, is capable of customer tracking of the order's progress.

B . ERP II, but not traditional ERP, is capable of customer tracking of the order's progress. Additionally, traditional ERP can automatically issue a purchase order and adjust output schedules.

C . ERP II, but not traditional ERP, is capable of customer tracking of the order's progress. Additionally, if more labor is needed human resources will be instructed to reassign or hire employees.

D . ERP II, but not traditional ERP, is capable of customer tracking of the order's progress.

Question: 98 The current generation of ERP software (ERP II) has added such front-office functions as

A. Inventory control.

B. Human resources.

C. Purchasing.

D. Customer service.

Answer (D) is correct.

The current generation of ERP software (ERP II) has added front-office functions. Customer relationship management applications in ERP II extend to customer service, finance-related matters, sales, and database creation and maintenance. Integrated data are helpful in better understanding customer needs, such as product preference or location of retail outlets. Thus, the organization may be able to optimize its sales forecasts, product line, and inventory levels.

A . Inventory control is a back-office function.

B . Human resources is a back-office function.

C . Purchasing is a back-office function.

Question: 99 An enterprise resource planning system is designed to

- A. Allow nonexperts to make decisions about a particular problem.
- B. Help with the decision-making process.
- C. Integrate data from all aspects of an organization's activities.
- D. Present executives with the information needed to make strategic plans.

Answer (C) is correct.

An enterprise resource planning system is intended to integrate enterprise-wide information systems by creating one database linked to all of an organization's applications.

- A . Problems should be solved by those individuals who are knowledgeable about the issue.
- B . An ERP system can help with the decision-making process. However, that is not what it is designed to do.
- D . An ERP system is more useful for day-to-day operations, not strategic management.

Question: 100 An enterprise resource planning (ERP) system has which of the following advantages over multiple independent functional systems?

- A. Modifications can be made to each module without affecting other modules.
- B. Increased responsiveness and flexibility while aiding in the decision-making process.
- C. Increased amount of data redundancy since more than one module contains the same information.
- D. Reduction in costs for implementation and training.

Answer (B) is correct.

ERP is the latest phase in the development of computerized systems for managing organizational resources. ERP is intended to integrate enterprise-wide information systems by creating one database linked to all of an organization's applications. The current generation of ERP software connects the organization with customers, suppliers, owners, creditors, and strategic allies. This increased integration allows for quicker response time and more flexibility.

A . In an ERP system, enterprise-wide information is integrated by creating one database linked to all of an organization's applications. Because of the integration, a change to one module will likely affect another.

C . ERP is intended to integrate enterprise-wide information systems by creating one database linked to all of an organization's applications. This reduces data redundancy.

D . The disadvantages of ERP are its extent and complexity, which make implementation difficult and costly.

PART 3 UNIT 7

1. Which of the following types of controls is not described in the IT Governance Institute's Control Objectives for Information and Related Technology (COBIT)?

- A. General controls.
- B. Exchange controls.
- C. Business controls.
- D. Process controls.

Answer (B) is correct.

COBIT describes controls in three areas: process controls, business controls, and IT general and application controls.

- A. COBIT describes controls in three areas: process controls, business controls, and IT general and application controls.
- C. COBIT describes controls in three areas: process controls, business controls, and IT general and application controls.
- D. COBIT describes controls in three areas: process controls, business controls, and IT general and application controls.

2. Control objectives regarding effectiveness and efficiency, reliability, and compliance are the basis of which control framework?

- A. ITGI.
- B. eSAC.
- C. COBIT.
- D. COSO.

Answer (D) is correct.

Probably the most well-known control framework in the U.S. is Internal Control – Integrated Framework, published in 1992 by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The document is commonly referred to as “the COSO Framework.” The COSO Framework defines internal control as

A process, effected by an organization's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

- Effectiveness and efficiency of operations
- Reliability of financial reporting
- Compliance with applicable laws and regulations

A.IT Governance Institute (ITGI) is the organization that copyrighted COBIT (Control Objectives for Information and Related Technology), which is an IT control framework.

B.The IIA's Electronic Systems Assurance and Control, eSAC, is not the source of these three control objectives.

C.COBIT, the ITGI's Control Objectives for Information and Related Technology, is not the source of these three control objectives.

3.Which of the following control frameworks was acknowledged by the U.S. Securities and Exchange Commission as an appropriate model for designing internal controls under the requirements of the Sarbanes-Oxley Act of 2002?

- A.COSO.
- B.eSAC.
- C.COBIT.
- D.ITGI.

Answer (A) is correct.

The importance and durability of the COSO Framework was reinforced when the U.S. Securities and Exchange Commission acknowledged it as an appropriate model for designing internal controls under the requirements of the Sarbanes-Oxley Act of 2002.

B.The IIA's eSAC was not referenced by the SEC.

C.The ITGI's COBIT was not referenced by the SEC.

D.IT Governance Institute (ITGI) is the organization that copyrighted COBIT (Control Objectives for Information and Related Technology), which is an IT control framework.

4.Which of the following control frameworks groups IT business assurance objectives into the five categories of availability, capability, functionality, protectability, and accountability?

- A.COBIT.
- B.COSO.
- C.eSAC.
- D.ITGI.

Answer (C) is correct.

eSAC's IT business assurance objectives fall into these five categories: availability, capability, functionality, protectability, and accountability.

- A.These five control objectives are not put forth by COBIT.
- B.These five control objectives are not put forth by COSO.
- D.IT Governance Institute (ITGI) is the organization that copyrighted COBIT (Control Objectives for Information and Related Technology), which is an IT control framework.

5.Why have many European Union countries not adopted ISO 14000 environmental standards?

- A.Following ISO 14000 standards will not reduce monitoring and inspection by regulatory agencies.
- B.Individual European Union countries' standards are typically more strict than ISO 14000 standards.
- C.Regulators are permitted to use voluntary audits as a basis for punitive action.
- D.ISO 14000 standards will not make it easier to do business across borders.

Answer (B) is correct.

Some European countries already have environmental systems in place, and individual countries' standards are typically more strict than the ISO 14000 standards. Furthermore, the relationship of these single-country standards with ISO 14000 is unclear.

- A.Many believe following ISO 14000 standards will reduce monitoring or inspection by regulatory agencies
- C.Many countries in the European Union have adopted measures similar to the ones in the US to prevent self-incrimination during voluntary ISO audits.
- D.ISO 14000 establishes internationally recognized standards that are intended to diminish trade barriers and make it easier to do business across borders.

6. According to eSAC, accountability is

- A. Usually an issue with regard to trade secrets and other intellectual property.
- B. The control attribute that identifies the source of a transaction.
- C. The restriction of access to processing and storage devices.
- D. Most often applicable to personal information about employees and customers.

Answer (B) is correct.

Accountability is the control attribute that identifies the source of a transaction. It specifies employees' roles, actions, and responsibilities. Thus, the person who caused a transaction is identifiable. Fundamental concepts of accountability are data ownership, identification, and authentication.

- A. Confidentiality is usually an issue with regard to trade secrets and other intellectual property.
- C. Physical security is the restriction of access to processing and storage devices.
- D. Privacy is the attribute most often applicable to personal information about employees and customers.

7. COBIT 4.1 is

- A. A set of guidelines to assist in implementing adequate controls over IT processes.
- B. A set of risks and responses to technology challenges.
- C. The update of the previous Systems Auditability and Control reports.
- D. Published by the Committee of Sponsoring Organizations.

Answer (A) is correct.

COBIT (Control Objectives for Information and Related Technology) version 4.1 is an IT control framework copyrighted by the IT Governance Institute (ITGI). COBIT 4.1 is a set of guidelines to assist management and business process owners in implementing adequate controls over IT processes and resources. It is designed to be an IT governance tool that facilitates understanding and managing the risks and benefits associated with information and related IT.

B.It refers to the eSAC model.

C.Electronic Systems Assurance and Control (eSAC) is the update of the previous Systems Auditability and Control reports.

D.COBIT is copyrighted by the ITGI. The Committee of Sponsoring Organizations published COSO.

8.COBIT 4.1 is targeted at all of the following except

A.Management.

B.Users.

C.Shareholders.

D.Auditors.

Answer (C) is correct.

COBIT 4.1 is targeted at three distinct audiences: management, users, and auditors. Management must balance risks and control costs in the volatile IT environment. Users need assurance about the security of, and controls over, internal or third-party IT services. Auditors must be able to support their opinions conveyed to management and others about the state of internal control. Because shareholders are not directly involved with IT services used in the day-to-day management of an organization, they are not a targeted audience of COBIT 4.1.

A.Management is a distinct audience of COBIT 4.1.

B.Users are a distinct audience of COBIT 4.1.

D.Auditors are a distinct audience of COBIT 4.1.

9.Which of the following statements is true concerning the COBIT 5 framework?

A.Governance and management are synonyms for the activities of upper management.

B.Information technology controls are most effectively designed and executed in isolation from other business processes.

C.Minimization of risk and resource use are among the major goals of COBIT 5.

D.Information and organizational structures are among the enablers identified in COBIT 5.

Answer (D) is correct.

COBIT 5 describes seven categories of enablers that support comprehensive IT governance and management, among them information and organizational structures.

- A. Under the COBIT 5 framework, the complexity of the modern enterprise requires governance and management to be treated as distinct activities.
- B. COBIT 5 takes a comprehensive view of all of the enterprise's functions and processes. Information technology pervades them all; it cannot be viewed as a function distinct from other enterprise activities.
- C. COBIT 5 asserts that the creation of stakeholder value is the fundamental goal of any enterprise. Value creation is achieved by balancing the realization of benefits with the optimization (note that it is not minimization) of risk and the use of resources.

10. Which of the following statements is inconsistent with the key principles of the COBIT 5 framework?

- A. Enterprise governance and management are treated as the same activity.
- B. The needs of stakeholders are the focus of all organizational activities.
- C. Information technology controls are considered to be intertwined with those of the organization's everyday operations.
- D. COBIT 5 can be applied even when other IT-related standards have been adopted.

Answer (A) is correct.

Under the COBIT 5 framework, the complexity of the modern enterprise requires governance and management to be treated as distinct activities.

- B. COBIT 5 asserts that the creation of stakeholder value is the fundamental goal of any enterprise.
- C. COBIT 5 takes a comprehensive view of all of the enterprise's functions and processes. Information technology pervades them all; it cannot be viewed as a function distinct from other enterprise activities.
- D. In acknowledgment of the availability of multiple IT-related standards and best practices, COBIT 5 provides an overall framework for enterprise IT within which other standards can be applied.

11. An organization should document its IT control framework for the following:

1. **Compliance with applicable regulations and legislation**
2. **Consistency with the organization's goals and objectives**

3. Reliable evidence that activities comply with management's governance policies and are consistent with the organization's risk appetite

- A.1 only.
- B.2 and 3 only.
- C.1 and 3 only.
- D.1, 2, and 3 only.

Answer (D) is correct.

Each organization should use the applicable components of existing frameworks to (1) categorize and assess IT controls and (2) provide and document its own IT control framework. It should achieve objectives related to (1) compliance with legal requirements, (2) consistency with organizational objectives, and (3) obtaining reliable evidence that control activities comply with governance policies and are consistent with the organization's risk appetite.

- A.The IT control framework also should address consistency with organizational objectives and obtaining reliable evidence that control activities comply with governance policies and are consistent with the organization's risk appetite.
- B.The IT control framework also should address compliance with legal requirements.
- C.The IT control framework also should address consistency with organizational objectives.

12.Which of the following is the intended users of control frameworks such as COBIT?

- A.Anyone with IT control responsibilities.
- B.Senior management only.
- C.Internal and external auditors only.
- D.Everyone in the organization.

Answer (A) is correct.

Control frameworks are intended for use by anyone in the organization who has control responsibilities, not just auditors or senior management. Control frameworks also can be used to communicate with senior management and the board.

- B.Intended users include anyone with control responsibilities.

- C. Auditors are not the only persons who are intended users.
- D. Some members of the organization are not responsible for control.

13. All of the following are part of a control framework that provides reasonable assurance of preventing computer fraud except

- A. Segregation of duties between the application programmer and the program librarian.
- B. Distinguishing between production programs and test programs.
- C. Segregation of duties between the programmer and operating systems and compilers.
- D. User testing of new applications during systems development.

Answer (C) is correct.

Systems programmers write systems software. Systems software is usually purchased from vendors in machine or assembly language. The operating systems and compilers function helps mediate between the purchased systems software and the firm's computer hardware. It also translates procedural languages into executable code (machine language).

- A. An application programmer should not have access to programs used in production that are controlled by the librarian.
- B. Program change controls distinguish between programs used to process live data and programs used for making and testing changes in the code.
- D. Testing of new applications by users is one of the most important controls to help prevent computer fraud. User acceptance is the final step before a program is put into production.

14. Which of the following is false with respect to the COBIT maturity model?

- A. It helps professionals explain where IT process management shortcomings exist.
- B. It is used for comprehensive assessment, gap analyses, and improvement planning.
- C. It focuses on both capability and performance.
- D. It permits analysis of IT processes from a nonexistent stage to an optimized process stage.

Answer (C) is correct.

The COBIT maturity model focuses on three dimensions of maturity: capability, coverage, and control. Although performance is a focus of COBIT, it is not a focus of its maturity model.

A.The COBIT maturity model helps professionals explain where IT process management shortcomings exist and establish objectives for improvement.

B.The COBIT maturity model states characteristics of IT management and describes how they evolve from nonexistent to optimized. The uses of the model include more for comprehensive assessment, gap analyses, and improvement planning.

D.The COBIT maturity model uses the following rating scale for the management of IT processes: (1) nonexistent, (2) initial, (3) repeatable, (4) defined, (5) managed, and (6) optimized.

15.Which of the following is not true about the advantages of adopting ISO 9000 standards?

A.Adoption of ISO 9000 standards may allow an entity to sell products in foreign markets.

B.ISO registration makes customers more comfortable with the supplier's products and services.

C.ISO 9000 allows entities to understand who internal customers and users are without sharing private information.

D.ISO registration may help entities discover internal process and quality improvements.

Answer (C) is correct.

Market pressure is usually the primary reason that entities adopt ISO 9000 standards. However, many entities that register make internal process and quality improvement as a result. ISO 9000 forces entities to share information, which leads to a better understanding of who internal customers and users are.

A.Many foreign countries are beginning to require adoption of ISO 9000 standards as a condition of selling products or services in their markets.

B.Many entities view ISO registration as a key to remaining competitive. ISO registration allows customers to be more comfortable with suppliers' products and services.

D.Many entities that implement ISO 9000 standards make internal process and quality improvements.

16.Which of the following is not required by ISO 9000 standards?

A.Establishment of a quality management system.

B.Quality assurance program.

C.Consistent high quality products.

D. Onsite inspections by a registrar.

Answer (C) is correct.

ISO 9000 is a set of generic standards for establishing and maintaining a quality system within an entity. The standards provide no basis for judging the quality of the end product. The marketplace makes this determination. The objective of ISO 9000 standards is to ensure consistent quality.

A. One of the most important steps under ISO 9000 standards is to establish and maintain a QMS. A QMS must be designed to control the process performance of the entity.

B. A basic requirement of an ISO QMS is that the entity must have processes for (1) inspection, (2) testing, (3) measurement, (4) analysis, and (5) improvement. To fulfill this requirement, an entity would establish a quality assurance program.

D. A registrar must ensure that the entity's quality control system conforms to the selected standard.

17. Which of the following statements is not true regarding ISO 9000 standards?

A. Compliance with the standards is voluntary.

B. The ISO 9000 standards are revised every 5 years to account for technical and market developments.

C. The objective of ISO 9000 standards is to ensure high quality products and services.

D. ISO 9000 is a set of standards for establishing and maintaining a quality system within an entity.

Answer (C) is correct.

The objective of ISO 9000 standards is to ensure consistent quality of the process even if the product quality is poor. The market determines the quality of the product.

A. Compliance is voluntary, but many entities are adopting the standards for competitive reasons or because of concern that the standards will be required in foreign markets.

B. The ISO rules specify that standards are periodically revised every 5 years to reflect technical and market developments.

D. ISO 9000 standards provide guidance for establishing and maintaining a quality management system (QMS).

18. Which of the following is a major element of the ISO 9000 quality management system standards?

- A.The principle that improved employee satisfaction will lead to increased productivity.
- B.The attitude and actions of the board and management regarding the significance of control within the organization.
- C.The assessment of the risk that objectives are not achieved.
- D.A requirement for organizations to monitor information on customer satisfaction as a measure of performance.

Answer (D) is correct.

ISO 9000:2008 provides a model for quality assurance programs. It requires an entity to demonstrate its ability to increase customer satisfaction through improving the QMS and ensuring conformity with requirements.

- A.The principle that improved employee satisfaction will lead to increased productivity is not an ISO 9000 standard. Following the eight management principles that underlie these standards should improve employee satisfaction.
- B.The control environment concept defined in the Glossary of The IIA's Standards is not reflected in the ISO 9000 standards.
- C.The ISO 9000 standards do not take a risk assessment approach. Risk assessment underlies internal auditing.

19.Which standard specifically applies to requirements for a quality management system (QMS)?

- A.ISO 9001.
- B.ISO 10012.
- C.ISO 14000.
- D.ISO 19011.

Answer (A) is correct.

ISO 9001 is a generic standard that states the requirements for a quality management system (QMS). It applies when an entity needs to demonstrate its ability to (1) sell a product that meets customer and regulatory requirements and (2) increase customer satisfaction through improving the QMS and ensuring conformity with requirements.

B.ISO 10012 states requirements for a measurement management system that can be used as part of the overall management system.

C.ISO 14000 is a set of environmental standards.

D.ISO 19011 applies to (1) audit principles, (2) managing audit programs, (3) conducting QMS and environmental management system audits, and (4) auditor competence.

20.Under the COBIT 5 framework, which of the following statements is false?

A.Enterprise goals are established in response to identified stakeholder needs.

B.Stakeholder drivers may be influenced by external, but not internal, factors.

C.Optimization of risk is one of the components of value creation.

D.Creation of stakeholder value is the fundamental goal of any enterprise.

Answer (B) is correct.

COBIT 5 recognizes that stakeholder needs are not fixed. They evolve under the influence of both internal factors (e.g., changes in organizational culture) and external factors (e.g., disruptive technologies). These factors are collectively referred to as stakeholder drivers.

A.COBIT 5 supplies 17 generic enterprise goals under four perspectives: financial, customer, internal, and learning and growth. Tied directly to the balanced scorecard model, these enterprise goals and their respective relationships to governance objectives are identified.

C.Under the principle “meeting stakeholder needs,” value creation is achieved by balancing three components: (1) realization of benefits, (2) optimization (not minimization) of risk, and (3) optimal use of resources.

D.The creation of stakeholder value is the fundamental goal of any enterprise, commercial or not, and is the most basic stakeholder need.

21.Which of the following statements accurately describes the impact that automation has on the controls normally present in a manual system?

- A.Transaction trails are more extensive in a computer-based system than in a manual system because there is always a one-for-one correspondence between data entry and output.
- B.Responsibility for custody of information assets is more concentrated in user departments in a computer-based system than it is in a manual system.
- C.Controls must be more explicit in a computer-based system because many processing points that present opportunities for human judgment in a manual system are eliminated.
- D.The quality of documentation becomes less critical in a computer-based system than it is in a manual system because data records are stored in machine-readable files.

Answer (C) is correct.

Using a computer does not change the basic concepts and objectives of control. However, the use of computers may modify the control techniques used. The processing of transactions may be combined with control activities previously performed separately, or control function may be combined within the information system activity.

- A.The “paper trail” is less extensive in an automated system. Combining processing and controls within the system reduces documentary evidence.
- B.Information assets are more likely to be under the control of the information system function.
- D.Documentation is more important in an information system. This is because information is more likely to be stored in machine-readable form than in hard copy, requiring specialized knowledge for retrieval.

22. Which of the following characteristics distinguishes computer processing from manual processing?

- A.Computer processing virtually eliminates the occurrence of computational error normally associated with manual processing.
- B.Errors or fraud in computer processing will be detected soon after their occurrence.
- C.The potential for systematic errors is ordinarily greater in manual processing than in computerized processing.
- D.Most computer systems are designed so that transaction trails useful for audit purposes do not exist.

Answer (A) is correct.

Computer processing uniformly subjects like transactions to the same processing instructions. A computer program defines the processing steps to accomplish a task. Once the program is written and tested appropriately, it will perform the task repetitively and without error. However, if the program contains an error, all transactions will be processed incorrectly.

- B. When an error does occur, for example, in input, it may not be discovered on a timely basis. Ordinarily, much less human intervention occurs once the transaction is processed.
- C. Systematic (repetitive) errors will occur in computerized processing if an error exists in the program.
- D. Adequately designed systems maintain transaction, console, and error logs that create useful audit trails.

23. A firm has recently converted its purchasing cycle from a manual process to an online computer system. Which of the following is a probable result associated with conversion to the new automatic system?

- A. Processing errors are increased.
- B. The firm's risk exposures are reduced.
- C. Processing time is increased.
- D. Traditional duties are less segregated.

Answer (D) is correct.

In a manual system with appropriate internal control, separate individuals are responsible for authorizing transactions, recording transactions, and custody of assets. These checks and balances prevent fraud and detect inaccurate or incomplete transactions. In a computer environment, however, this segregation of duties is not always feasible. For example, a computer may print checks, record disbursements, and generate information for reconciling the account balance.

- A. A computer system decreases processing errors.
- B. The conversion to a new system does not reduce the number of risk exposures.
- C. Processing time is decreased.

24. A small client recently put its cash disbursements system on a server. About which of the following internal control features would an auditor most likely be concerned?

- A. Programming of the applications are in Visual Basic rather than Java.
- B. The server is operated by employees who have cash custody responsibilities.
- C. Only one employee has the password to gain access to the cash disbursement system.

D. There are restrictions on the amount of data that can be stored and on the length of time that data can be stored.

Answer (B) is correct.

Segregation of duties is a basic category of control activities. Functions are incompatible if a person is in a position both to perpetrate and conceal fraud or errors. Hence, the duties of authorizing transactions, recording transactions, and custody of assets should be assigned to different people. Those employees that operate the server may be able to override the controls to change records to conceal a theft of cash.

A. The choice of language would have little effect on internal control.

C. The limitation on access would be considered a strength.

D. Restrictions on the amount of data that can be stored and on the length of time that data can be stored do not constitute a control weakness.

25. Which of the following statements most likely represents a disadvantage for an entity that keeps data files on a server rather than on a manual system?

A. Attention is focused on the accuracy of the programming process rather than errors in individual transactions.

B. It is usually easier for unauthorized persons to access and alter the files.

C. Random error associated with processing similar transactions in different ways is usually greater.

D. It is usually more difficult to compare recorded accountability with the physical count of assets.

Answer (B) is correct.

In a manual system, one individual is usually assigned responsibility for maintaining and safeguarding the records. However, in a server environment, the data files may be subject to change by others without documentation or an indication of who made the changes.

A. The focus on programming is an advantage of using a server. A software program allows transactions to be processed uniformly.

C. It describes a disadvantage of a manual system.

D. The method of maintaining the files is independent of the ability to compare this information in the file with the physical count of assets.

26. A small company has changed from a system of recording time worked on clock cards to a computerized payroll system in which employees record time in and out with magnetic cards. The computer system automatically updates all payroll records. Because of this change,

- A. A generalized computer audit program must be used.
- B. Part of the audit trail is altered.
- C. The potential for payroll-related fraud is diminished.
- D. Transactions must be processed in batches.

Answer (B) is correct.

In a manual payroll system, a paper trail of documents is created to provide audit evidence that controls over each step in processing are in place and functioning. One element of a computer system that differentiates it from a manual system is that a transaction trail useful for auditing purposes might exist only for a brief time or only in computer-readable form.

- A. Use of generalized audit software is only one of many ways of auditing a computer-based system.
- C. Conversion to a computer system may actually increase the chance of fraud by eliminating segregation of incompatible functions and other controls.
- D. Automatic updating indicates that processing is not in batch mode.

27. Batch processing

- A. Is not used by most businesses because it reduces the audit trail.
- B. Allows users to inquire about groups of information contained in the system.
- C. Accumulates transaction records into groups for processing against the master file on a delayed basis.
- D. Can only be performed on a centralized basis.

Answer (C) is correct.

Batch processing is the accumulation and grouping of transactions for processing on a delayed basis. The batch approach is suitable for applications that can be processed against the master file at intervals and involve large volumes of similar items, such as payroll, sales, inventory, and billing.

- A. Batch processing provides as much of an audit trail as any computerized operation.
- B. Batch processing refers to the input of data, not inquiry
- D. Batch processing can also be performed on a decentralized basis.

28. What type of computer processing system is characterized by data that are assembled from more than one location and records that are updated immediately?

- A. Personal computer systems.
- B. Data compression systems.
- C. Batch processing systems.
- D. Online, real-time systems.

Answer (D) is correct.

Real-time processing involves processing an input record and receiving the output soon enough to affect a current decision-making process. In a real-time system, the user interacts with the system to control an ongoing activity. Online indicates that the decision maker is in direct communication with the computer. Online, real-time systems usually permit access to the main computer from multiple remote terminals.

- A. Access from multiple locations is more typical of larger computer systems than of personal computer systems.
- B. Data compression systems encode data to take up less storage space.
- C. Batching of transactions requires assembly of data at one place and a delay in updating.

29. Errors in a batch computer system caused by incorrect programs or data may not be detected immediately because

- A. Errors in some transactions may cause rejection of other transactions in the batch.
- B. The identification of errors in input data typically is not part of the program.
- C. There are time delays in processing transactions in a batch system.
- D. The processing of transactions in a batch system is not uniform.

Answer (C) is correct.

Transactions in a batch computer system are grouped together, or batched, prior to processing. Batches may be processed either daily, weekly, or even monthly. Thus, considerable time may elapse between the initiation of the transaction and the discovery of an error.

A.The transactions within the batch are typically not contingent upon one another.

B.Edit checks can be incorporated into batch processing environments. However, the edit checks are used to test the transactions in batches.

D.A batch of transactions is typically processed uniformly.

30.Which of the following risks are greater in computerized systems than in manual systems?

- 1) **Erroneous data conversion**
- 2) **Erroneous source document preparation**
- 3) **Repetition of errors**
- 4) **Concentration of data**

A.1 and 2.

B.2 and 3.

C.1, 3, and 4.

D.1, 2, 3, and 4.

Answer (C) is correct.

Unlike a manual system, a computer system converts data to machine-readable form so that transactions can be processed. This additional step increases the risk of input error. Moreover, if an error exists in the program, systematic, repetitive errors will occur in processing transactions. Finally, data are typically stored magnetically on tapes or disks. This concentration of data increases the risk of loss from natural and other disasters. Source document preparation either precedes processing or is eliminated altogether in a computerized system. Thus, the risk of erroneous source document preparation in computerized systems is the same as or less than the equivalent risk in manual systems.

A.Source document preparation either precedes processing or is eliminated altogether in a computerized system. Thus, the risk of erroneous source document preparation in computerized systems is the same as or less than the equivalent risk in manual systems.

B.Source document preparation either precedes processing or is eliminated altogether in a computerized system. Thus, the risk of erroneous source document preparation in computerized systems is the same as or less than the equivalent risk in manual systems.

D.Source document preparation either precedes processing or is eliminated altogether in a computerized system. Thus, the risk of erroneous source document preparation in computerized systems is the same as or less than the equivalent risk in manual systems.

31. Which of the following is a key difference in controls when changing from a manual system to a computer system?

- A. Internal control principles change.
- B. Internal control objectives differ.
- C. Control objectives are more difficult to achieve.
- D. Methodologies for implementing controls change.

Answer (D) is correct.

The controls in a manual and in a computerized system are geared toward the same control objectives. Only the design and implementation are different.

- A. Sound internal control principles apply to both manual and computerized systems. Though they differ in design and implementation, the controls are geared toward the same objectives.
- B. Though they differ in design and implementation, the controls in a manual and in a computerized system are geared toward the same objectives.
- C. Achieving internal control objectives can be quite challenging in a manual environment.

32. Compared to batch processing, real-time processing has which of the following advantages?

- A. Ease of auditing.
- B. Ease of implementation.
- C. Timeliness of information.
- D. Efficiency of processing.

Answer (C) is correct.

Real-time processing involves processing an input record and receiving the output soon enough to affect a current decision-making process. Thus, the emphasis is on receiving the output in a timely fashion. In comparison, the batch approach is suitable for applications that can be processed at intervals.

A. Real-time processing is more difficult to audit. Batch processing involves uniform processing of a group of transactions at one place and time. Thus, it produces as much of an audit trail as any computer operation. Real-time processing permits immediate updating as transactions occur and access from multiple sites.

B. Real-time processing is more difficult to implement. It requires the system to have the capability to handle inquiries and update files as transactions occur.

D. Batch processing is typically more efficient.

33. Compared to online real-time processing, batch processing has which of the following disadvantages?

A. A greater level of control is necessary.

B. Additional computing resources are required.

C. Additional personnel are required.

D. Stored data are current only after the update process.

Answer (D) is correct.

In batch processing, transactions are gathered throughout the workday and stored offline until a period, often overnight, when computer resources are freed up. These collections of transactions, called "batches," are then processed as a group. During the limbo period between entry and storage of the transactions and processing of the batch, the database is not current.

A. Batch processing requires a lesser degree of control than online real-time processing.

B. Fewer computing resources are generally required in a batch processing environment over an online real-time one.

C. Often fewer personnel are required in a batch processing environment over an online real-time one.

34. A payroll system's master file is processed at night once every 2 weeks. There is relatively little file maintenance required. Which of the following is most likely to be the appropriate processing method under the circumstances?

- A.Parallel.
- B.Online, real-time.
- C.Network.
- D.Batch.

Answer (D) is correct.

Batch processing is the accumulation and grouping of transactions for processing on a delayed basis. The batch approach is suitable for applications that can be processed at intervals and involve large volumes of similar items, e.g., payroll, sales, inventory, and billing.

- A.Parallel means that two or more processes are executed concurrently.
- B.Online means simply that data entry is performed via a terminal to a computer, and real-time means that transactions are processed when captured. The payroll operation need not be online or real-time.
- C.A network of computers may employ any mode of processing but is most likely to be used for online, real-time applications.

35.A new purchasing system for just-in-time production requirements has been proposed. Users want access to current master file information at all times. To satisfy user needs, master file changes should be implemented with

- A.Periodic entry with subsequent batch processing.
- B.Periodic entry with immediate batch processing.
- C.Online entry with subsequent batch processing.
- D.Online entry with immediate processing.

Answer (D) is correct.

JIT production attempts to minimize inventory by more closely coordinating deliveries of needed materials and production. Thus, inventory data must be current. Online entry with immediate (real-time) processing gives users current master file information because changes are entered and applied to the master file as they occur. However, check printing can still occur in batch mode.

- A.Periodic entry and batch processing do not permit the immediate updating required by JIT production.
- B.Periodic entry does not permit immediate updating, and “immediate batch processing” is a contradiction in terms.

C. Online entry and subsequent batch processing do not permit the immediate updating required by JIT production.

36. The concept of timeliness of data availability is most relevant to

A. Computerized systems.

B. Payroll systems.

C. Manual systems.

D. Online systems.

Answer (D) is correct.

An online processing system is in direct communication with the computer, giving it the capability to handle transactions as they are entered. An online system permits both immediate posting (updating) and inquiry of master files as transactions occur. In an online system, data are immediately available to users upon entry.

A. Timeliness is not necessarily an element of a computerized system.

B. Timeliness is not necessarily an element of a payroll system.

C. Timeliness is not necessarily an element of a manual system.

37. The relationship between online, real-time database systems and batch processing systems is that

A. A firm will have only one processing mode because a single computer cannot do both.

B. A firm will not use batch processing if it has a large computer.

C. A firm may use both processing modes concurrently.

D. A firm will always prefer an online, real-time processing system because batch processing is slow.

Answer (C) is correct.

Firms may find it beneficial to incorporate both processing modes into one system. A database may be established for information that must be obtained quickly, for instance, a sales processing system in which credit information must be available to sales personnel on an ongoing basis. However, other

processing requirements may take advantage of the speed and control provided in a batch processing system. For example, payroll transactions may be processed quickly and efficiently in a batch mode.

A. One computer can operate in both modes.

B. Firms with large computers find it both cost effective and efficient to group transactions and process them periodically.

D. A firm will not automatically prefer an online, real-time system. When transactions, e.g., payroll, can be conveniently grouped, processing is extremely fast and efficient in a batch mode.

38. What type of computerized data processing system would be most appropriate for a company that is opening a new retail location?

A. Batch processing.

B. Real-time processing.

C. Sequential-file processing.

D. Direct-access processing.

Answer (B) is correct.

Real-time processing is most useful in systems that require having the latest information available at all times. In a retail environment, such a system would potentially allow the company to track inventory, cash, labor, etc., as they change.

A. Batch processing accumulates data and processes it in batches. Thus, data are not as timely as in real-time processing.

C. Sequential-file processing is a file storage process, linear in nature, that makes accessing particular data points cumbersome.

D. Direct-access processing is not a self-updating system, but a system to file data.

39. Batch and online processing modes

A. Are mutually exclusive.

B. Can be used in combination in a single application.

C. Are outmoded means of processing data.

D. Are forms of real-time processing.

Answer (B) is correct.

Batch and online modes can be combined in a single application.

A. Batch and online modes can be combined in a single application.

C. Both batch and online modes are currently in use.

D. Real-time processing describes a system that is updated from moment to moment, such as an airline reservation system. Online processing is appropriate to such a system, but batch processing is not.

40. There are many ways that realtime accounts receivable systems differ from batch accounts receivable systems. Which one of the following is not correct?

<u>Realtime Systems</u>	<u>Batch Systems</u>
A. Must use direct-access files	Can use simple sequential files
B. Processing is done on demand	Processing is done during scheduled computer runs
C. Processing choices are menu-driven	Processing is interactive
D. Invoicing is performed as goods are shipped	Invoicing is performed through scheduled billing runs

Answer (C) is correct.

Realtime processing involves processing an input record and receiving the output soon enough to affect a current decision-making process. Such systems are often menu driven, providing the user with prearranged courses of actions. Batch processing, on the other hand, is the accumulation and grouping of transactions for processing on a delayed basis. Batch processing is thus not interactive, that is, the user does not receive immediate feedback from his or her input.

A. Realtime systems must use direct access in order to provide the user with immediate feedback, and batch systems tend to use the slower sequential storage method.

B. In a realtime system, the processing is done immediately so that the user can get feedback soon enough to affect a current decision, whereas the batch processing is done on a scheduled basis, often overnight when there are fewer demands on the computer.

D. In a realtime system, the system is updated as soon as the order is placed, and the invoice can be printed as soon as the order is shipped, whereas in a batch system, periodic preparation of mass billing is the only practical way.

41. Which of the following transaction processing modes provides the most accurate and complete information for decision making?

- A. Batch.
- B. Distributed.
- C. Online.
- D. Application.

Answer (C) is correct.

In online processing, the computer processes each transaction individually as the user enters it. The user gets immediate feedback on whether the transaction was accepted or not. These systems have the latest information available at all times.

- A. In batch processing, transactions are accumulated and submitted to the computer as a single batch. This accumulation of transactions for processing on a delayed basis is still widely used.
- B. Distributed is not a transaction processing mode.
- D. Application is not a transaction processing mode.

42. Mill Co. uses a batch processing method to process its sales transactions. Data on Mill's sales transaction file are sorted by customer number and are subjected to programmed edit checks in preparing its invoices, sales journals, and updated customer account balances. One of the direct outputs of the creation of this file most likely would be a

- A. Report showing exceptions and control totals.
- B. Printout of the updated inventory records.
- C. Report showing overdue accounts receivable.
- D. Printout of the sales price master file.

Answer (A) is correct.

Batch processing is useful for processing large volumes of data. Editing (validation) of data should produce a cumulative automated error listing that includes not only errors found in the current processing run but also uncorrected errors from earlier runs. The creation of the file will also generate various totals that will serve as controls over the completeness and accuracy of the processing.

B.An online database system is more appropriate for printing records that require up-to-date information.

C.Testing for overdue accounts receivable should be done prior to approving current sales orders.

D.A complete listing of sales prices would not be found in a sales transactions file.

43.Which statement about memo posting is false?

A.It allows the use of batch totals and other controls.

B.It creates real-time entries that are posted to a temporary memo file.

C.It does not allow changes to be viewed immediately.

D.Batch processing controls are applied before the changes become permanent.

Answer (C) is correct.

Memo posting is an intermediate stage between batch processing and real-time processing. It is used by banks and other entities to post real-time entries to a temporary memo file and permanently updates the balance at the end of the day. Memo posting allows changes to be viewed immediately.

A.Memo posting uses batch processing while simultaneously allowing changes to be viewed immediately.

B.Memo posting makes real-time entries to a temporary memo file.

D.Changes become permanent after batch processing procedures are applied. Before batch processing occurs, the changes are recorded in a temporary memo file.

44.When assessing application controls, which one of the following input controls or edit checks is most likely to be used to detect a data input error in the customer account number field?

A.Limit check.

B.Validity check.

C.Control total.

D.Hash total.

Answer (B) is correct.

Validity checks are tests of identification numbers or transaction codes for validity by comparison with items already known to be correct or authorized. For example, Social Security numbers on payroll input records can be compared with Social Security numbers authorized by the personnel department.

A.Reasonableness, limit, and range checks are based upon known limits for given information. For example, the hours worked per week is not likely to be greater than 45.

C.A record count is a control total of the number of records processed during the operation of a program. Financial totals summarize dollar amounts in an information field in a group of records.

D.A hash total is the number obtained from totaling the same field value for each transaction in a batch. The total has no meaning or value other than as a comparison with another hash total.

45.If a control total were to be computed on each of the following data items, which would best be identified as a hash total for a payroll computer application?

A.Hours worked.

B.Total debits and total credits.

C.Net pay.

D.Department numbers.

Answer (D) is correct.

The three types of control totals are record counts, financial totals, and hash totals. Record counts establish the number of source documents and reconcile it to the number of output records. Financial totals compute dollar totals from source documents (e.g., the total dollar amount of invoices processed) and reconcile them with the output records. Hash totals add numbers on input documents that are not normally added (e.g., department numbers), resulting in a total that is “meaningless” for any purpose other than this control.

A.Hours worked is an example of a financial total.

B.Total debits and total credits is a financial total.

C.Net pay is a financial total.

46. A catalog company has been experiencing an increasing incidence of problems in which the wrong products have been shipped to the customer. Most of the customer orders come in over the telephone, and an operator enters the data into the order system immediately. Which of the following control procedures, if properly implemented, would address the problem?

- 1. Have the computer automatically assign a sequential order number to each customer order.**
- 2. Implement a self-checking digit algorithm for each product number and request entries by product number.**
- 3. Request entries by product number, have the computer program identify the product and price, and require the operator to orally verify the product description with the customer.**

A.2 only.

B.1, 2, and 3.

C.2 and 3 only.

D.1 and 2 only.

Answer (C) is correct.

A self-checking digit detects incorrect codes. The digit is generated by applying an algorithm to the code. During input, the digit is recomputed by applying the algorithm to the code actually entered. Oral verification also addresses the problem of incorrectly identifying the product number. Assigning a sequential number to the customer's order helps build an audit trail but does not address the product identification issue.

A.Oral verification also would address the problem.

B.Assigning a sequential number to the customer's order helps build an audit trail but does not address the product identification issue.

D.Assigning a sequential number to the customer's order helps build an audit trail but does not address the product identification issue.

47. The two broad groupings of information systems control activities are general controls and application controls. General controls include controls

A.Relating to the correction and resubmission of faulty data.

B.For developing, modifying, and maintaining computer programs.

C.Designed to ensure that only authorized users receive output from processing.

D.Designed to ensure that all data submitted for processing have been properly authorized.

Answer (B) is correct.

General controls are policies and procedures that relate to many information systems applications and support the effective functioning of application controls by helping to ensure the continued proper operation of information systems. General controls include controls over (1) data center and network operations; (2) systems software acquisition and maintenance; (3) access security; and (4) application systems acquisition, development, and maintenance.

A. Control over report distribution (output), correction of input errors, and authorization of input are application controls

C. Control over report distribution (output), correction of input errors, and authorization of input are application controls.

D. Control over report distribution (output), correction of input errors, and authorization of input are application controls.

48. The purpose of input controls is to ensure the

A. Authorization of access to data files.

B. Authorization of access to program files.

C. Completeness, accuracy, and validity of updating.

D. Completeness, accuracy, and validity of input.

Answer (D) is correct.

Input controls provide reasonable assurance that data received for computer processing have been properly authorized and are in a form suitable for processing, i.e., complete, accurate, and valid. Input controls also relate to rejection, correction, and resubmission of data that were initially incorrect.

A. Access controls authorize access to data files.

B. Access controls authorize access to program files.

C. Processing controls ensure the completeness, accuracy, and validity of updating.

49. A mail-order retailer of low-cost novelty items is receiving an increasing number of complaints from customers about the wrong merchandise being shipped. The order code for items has the format wwxyzz. The major category is ww, xx is the minor category, yy identifies the item, and zz identifies the catalog. In many cases, the wrong merchandise was sent because adjacent characters in the order code had been transposed. The best control for decreasing the number of orders with the wrong merchandise is to

- A.Require customers to specify the name for each item they order.
- B.Add check-digits to the order codes and verify them for each order.
- C.Separate the parts of the order code with hyphens to make the characters easier to read.
- D.Use a master file reference for all order codes to verify the existence of items.

Answer (B) is correct.

Self-checking digits may be used to detect incorrect codes. The digit is generated by applying an algorithm to the code. During the input process, the check digit is recomputed by applying the same algorithm to the code actually entered.

- A.Having customers specify the name for each item they order would let the company correct erroneous order codes once they had been detected, but would not, in general, detect erroneous codes.
- C.Separating the parts of the order code with hyphens would make the characters easier to read but would not cure the problem of transposed characters.
- D.Using a master file reference for all order codes would verify the existence of items but would not detect erroneous order codes in which transposed characters in an order code match other items.

50.Which of the following computerized control procedures would be most effective in ensuring that data uploaded from desktop computers to a server are complete and that no additional data are added?

- A.Self-checking digits to ensure that only authorized part numbers are added to the database.
- B.Batch control totals, including control totals and hash totals.
- C.Passwords that effectively limit access to only those authorized to upload the data to the mainframe computer.
- D.Field-level edit controls that test each field for alphanumeric integrity.

Answer (B) is correct.

Batch control totals for the data transferred can be reconciled with the batch control totals in the existing file. This comparison provides information on the completion of the data transfer. Batch totals may include record counts, totals of certain critical amounts, or hash totals. A hash total is a control total without a defined meaning, such as the total of employee numbers or invoice numbers, that is used to verify the completeness of data. Thus, the hash total for the employee listing by the personnel department could be compared with the total generated during the payroll run.

A. Self-checking digits detect inaccurate identification numbers. They are an effective control to ensure that the appropriate part has been identified. However, the control objective is to ensure that data transfer is complete.

C. Passwords help ensure that only authorized personnel make the transfer, not that data transfer is complete.

D. Field checks are effective input controls, but they do not ensure completeness of data transfer.

51. Omen Company is a manufacturer of men's shirts. It distributes weekly sales reports to each sales manager. The quantity 2R5 appeared in the quantity sold column for one of the items on the weekly sales report for one of the sales managers. The most likely explanation for what has occurred is that the

A. Output quantity has been stated in hexadecimal numbers.

B. Computer has malfunctioned during execution.

C. Printer has malfunctioned and the "R" should have been a decimal point.

D. Program did not contain a data checking routine for input data.

Answer (D) is correct.

The probable explanation for reporting a quantity using a character other than a digit is that the data were incorrectly encoded and the computer program did not perform a field check, which would have detected the error. A field check tests whether a field consists of the proper characters, whether alphabetic, numeric, special, or combinations thereof.

A. R is not a hexadecimal character. Hexadecimal characters are 0-9 and A-F representing 0 to 15 in decimal.

B. The probability of a computer malfunction resulting in the printing of an R is slight.

C. The number 2.5 would not be appropriate for a quantity of shirts sold.

52. The online data entry control called preformatting is

A. A program initiated prior to regular input to discover errors in data before entry so that the errors can be corrected.

B. A check to determine if all data items for a transaction have been entered by the person entering the data.

C. A series of requests for required input data that requires an acceptable response to each request before a subsequent request is made.

D.The display of a document with blanks for data items to be entered by the person entering the data.

Answer (D) is correct.

To avoid data entry errors in online systems, a preformatted screen approach may be used. It is a screen prompting approach that involves the display on a monitor of a set of boxes for entry of specified data items. The format may even be in the form of a copy of a transaction document. This technique is best suited to conversion of data from a source document.

A.An edit routine is a program initiated prior to regular input to discover errors in data before entry so that the errors can be corrected.

B.A completeness check tests whether all data items for a transaction have been entered by the person entering the data.

C.The dialogue approach is another screen prompting method for data entry. It is most appropriate when information is received orally, e.g., by phone.

53.Which one of the following input controls or edit checks would catch certain types of errors within the payment amount field of a transaction?

A.Record count.

B.Echo check.

C.Check digit.

D.Limit check.

Answer (D) is correct.

A limit, reasonableness, or range test determines whether an amount is within a predetermined limit for given information. It can only detect certain errors (i.e., those that exceed the acceptable limit).

A.A record count determines the number of documents entered into a process.

B.An echo check tests the reliability of computer hardware. For example, the CPU sends a signal to a printer that is echoed just prior to printing. The signal verifies that the proper print position has been activated.

C.A self-checking number is generated by applying an algorithm to an identification number.

54.Which of the following should the auditor recommend as the most economical point at which to correct input errors in an online system?

- A. Input data are balanced with computer-produced control totals.
- B. Entry of data into each field of a record is completed.
- C. Output data are balanced with computer-produced control totals and delivered to the user.
- D. Entry of data into each record is completed.

Answer (B) is correct.

The most economical point at which to correct input errors is at the earliest time after the data has been entered into the system. The earliest point is the entry of data into each field of a record. Errors can easily be rectified because the proper information is already available.

- A. The most economical point for correcting input errors is the time at which data are entered into the system.
- C. The most economical point for correcting input errors is the time at which data are entered into the system.
- D. The most economical point for correcting input errors is the time at which data are entered into the system.

55. The most common computer-related problem confronting organizations is

- A. Hardware malfunction.
- B. Input errors and omissions.
- C. Disruption to computer processing caused by natural disasters.
- D. Fraud.

Answer (B) is correct.

The most common problem confronting an organization in its use of computers is erroneous or incomplete input. Input is especially susceptible to errors and omissions because of the substantial human intervention required. Comprehensive and effective input controls are necessary to ensure that data stored in files or used in processing are not contaminated.

- A. Hardware malfunction is not considered a major problem once the development and testing phase is complete.

C.The second most common problem is the disruption to processing caused by natural disasters, such as fire or power failures.

D.The third most common problem is computer abuse, e.g., fraud.

56.Fact Pattern: Batchelder Company has the following invoices in a batch:

Invoice Number	Product	Quantity	Unit Price
201	F10	150	US \$ 5.00
202	G15	200	10.00
203	H20	250	25.00
204	K35	300	30.00

Which of the following would Batchelder most likely use as a hash total?

A.FGHK80

B.4

C.204

D.810

Answer (D) is correct.

Input controls in batch computer systems are used to determine that no data are lost or added to the batch. Depending on the sophistication of a particular system, control may be accomplished by using record counts, batch totals, or hash totals. The hash total is a control total without a defined meaning, such as the total of employee numbers or invoice numbers, that is used to verify the completeness of data. The hash total of the invoice numbers is 810.

A.A hash total is ordinarily the sum of a numeric field.

B.It is a record count.

C.It is an invoice number.

57. Fact Pattern: Batchelder Company has the following invoices in a batch:

Invoice Number	Product	Quantity	Unit Price
201	F10	150	US \$ 5.00
202	G15	200	10.00
203	H20	250	25.00
204	K35	300	30.00

Which of the following would Batchelder most likely use as a record count?

- A.1
- B.4
- C.810
- D.900

Answer (B) is correct.

Input controls in batch computer systems are used to determine that no data are lost or added to the batch. Depending on the sophistication of a particular system, control may be accomplished by using record counts, batch totals, or hash totals. A record count establishes the number of source documents and reconciles it to the number of output records. The total number of invoices processed is an example of a record count. In this case, the record count is 4.

- A.The number of batches is 1.
- C.A hash total of the invoice numbers is 810.
- D.The total quantity of items is 900.

58.In an order-entry system in which manually-prepared source documents are entered online for immediate processing, which of the following is an example of an appropriate input-output control?

- A.Password authorization procedure.
- B.Check-digit validation procedure.
- C.Hash total verification.
- D.Backup and recovery procedures.

Answer (B) is correct.

Self-checking digits may be used to detect incorrect identification numbers. The digit is generated by applying an algorithm to the ID number. During the input process, the check digit is recomputed by applying the same algorithm to the code actually entered.

A.Password authorization is a general control over access to the system or parts of it.

C.Hash totals (otherwise meaningless control totals, e.g., of identification numbers) are appropriate for batch processing.

D.Backup and recovery procedures are general controls.

59.A customer intended to order 100 units of product Z96014, but incorrectly ordered nonexistent product Z96015. Which of the following controls most likely would detect this error?

A.Check digit verification.

B.Record count.

C.Hash total.

D.Redundant data check.

Answer (A) is correct.

Check digit verification is used to identify incorrect identification numbers. The digit is generated by applying an algorithm to the ID number. During input, the check digit is recomputed by applying the same algorithm to the entered ID number.

B.A record count is a control total of the number of transactions in a batch.

C.A hash total is a control total that is the sum of a field without a defined meaning.

D.A redundant data check searches for duplicate information in a database.

60.A validation check used to determine if a quantity ordered field contains only numbers is an example of a(n)

A.Input control.

B.Audit trail control.

C.Processing control.

D.Data security control.

Answer (A) is correct.

A validation check at data entry verifying that a quantity field contains only numbers is an example of a programmatic means of ensuring the accuracy of an input value. Thus, it is an input control.

B.The purpose of an audit trail control is to ensure that a chronological record of all relevant events in a system has been recorded.

C.A processing control ensures that data are complete and accurate during updating.

D.A data security control ensures that only authorized individuals are permitted to access and use a system.

61.An accounts payable program posted a payable to a vendor not included in the online vendor master file. A control that would prevent this error is a

A.Validity check.

B.Range check.

C.Reasonableness test.

D.Parity check.

Answer (A) is correct.

Validity checks are tests of identification numbers or transaction codes for validity by comparison with items already known to be correct or authorized. For example, Social Security numbers on payroll input records can be compared with Social Security numbers authorized by the personnel department.

B.A range check is based on known limits for given information.

C.A reasonableness test is based on known limits for given information.

D.A parity check adds the bits in a character or message and checks the sum to determine if it is odd or even, depending on whether the computer has odd or even parity.

62.An employee in the receiving department keyed in a shipment to the accounts payable system and inadvertently omitted the purchase order number. The best systems control to detect this error is

A.Completeness test.

B.Sequence check.

- C.Reasonableness test.
- D.Compatibility test.

Answer (A) is correct.

A completeness test checks that all data elements are entered before processing. An interactive system can be programmed to notify the user to enter the number before accepting the receiving report.

- B.A sequence check tests for the ordering, not omission, of records.
- C.A limit or reasonableness test checks the values of data items against established limits.
- D.A compatibility test (field check) determines whether characters are appropriate to a field.

63.To avoid invalid data input, a bank added an extra number at the end of each account number and subjected the new number to an algorithm. This technique is known as

- A.Sequence check.
- B.A check digit.
- C.Cross-footing.
- D.Field check.

Answer (B) is correct.

Self-checking digits may be used to detect incorrect identification numbers. A check digit is an extra reference number that follows an identification code and bears a mathematical relationship to the other digits. The extra digit is input with the data. The identification code can be subjected to an algorithm and compared to the check digit.

- A.Sequence checks determine that records are in the proper order.
- C.Cross-footing compares an amount to the sum of its components.
- D.Field checks are tests of the characters in a field to verify that they are of an appropriate type for that field (i.e., alphabetic versus numeric).

64.What technique could be used to prevent the input of alphabetic characters into an all-numeric identification number?

- A.A sequence check.
- B.A check digit.
- C.A record count.
- D.A format check.

Answer (D) is correct.

With a format check, the computer checks the characteristics of the character content, length, or sign of the individual data fields. Field checks, sign checks, and range checks are examples of format checks.

- A.A sequence check determines that records are in proper order.
- B.A check digit is used to detect an incorrect ID number.
- C.A record count is a control total of the number of records processed during the operation of a program.

65.Which of the following actions would best address a concern that data uploaded from a desktop computer may be erroneous?

- A.The mainframe computer should be backed up on a regular basis.
- B.Two persons should be present at the desktop computer when it is uploading data.
- C.The mainframe computer should subject the data to the same edits and validation routines that online data entry would require.
- D.Users should be required to review a random sample of processed data.

Answer (C) is correct.

The same edits and validation routines used for online data entry should be applied to data uploaded from a desktop computer. This could help prevent data errors.

- A.This practice is a wise control, but it does not address the issue of the integrity of uploaded data. Backups cannot prevent or detect data-upload problems; they can only help correct data errors that a poor upload caused.
- B.This control may be somewhat helpful in preventing fraud in data uploads, but it is of little use in preventing errors.
- D.This control is detective in nature, but the error could have already caused erroneous reports and management decisions. Having users try to find errors in uploaded data would be costly.

66.Unauthorized alteration of online records can be prevented by employing

- A.Key verification.
- B.Computer sequence checks.
- C.Computer matching.
- D.Database access controls.

Answer (D) is correct.

Users can gain access to databases from terminals only through established recognition and authorization procedures; thus, unauthorized access is prevented.

- A.Key verification ensures the accuracy of selected fields by requiring a different individual to rekey them.
- B.Sequence checks are used to ensure the completeness of input or update data by checking the use of preassigned document serial numbers.
- C.Computer matching entails checking selected fields of input data with information held in a suspense or master file.

67.Which of the following controls is a processing control designed to ensure the reliability and accuracy of data processing?

	<u>Limit Test</u>	<u>Validity Check Test</u>
A.	Yes	Yes
B.	No	No
C.	No	Yes
D.	Yes	No

Answer (A) is correct.

Some processing controls repeat the steps performed during input, such as limit or range and validity checks. These tests include field checks, financial totals, hash totals, reasonableness, limit or range checks, record counts, check digits, sequence checks, sign checks, and validity checks.

- B.Limit tests and validity checks are both types of processing controls.

C.Limit tests and validity checks are both types of processing controls.

D.Limit tests and validity checks are both types of processing controls.

68.An employee mistakenly enters April 31 in the date field. Which of the following programmed edit checks offers the best solution for detecting this error?

A.Online prompting.

B.Mathematical accuracy.

C.Preformatted screen.

D.Reasonableness.

Answer (D) is correct.

Limit (or reasonableness) tests are edit checks that allow certain entries to be rejected by the system, based on known limits for given information. For example, in the date field, an entry for April 31 would be rejected if the month end limit for April was programmed to be April 30.

A.Although online prompting may assist in detecting this type of error, it is not the best control of the given choices.

B.Mathematical accuracy would be irrelevant for detecting a date field error.

C.A preformatted screen may be designed to look exactly like the corresponding paper document. Although this input control might detect this data entry error, a better solution is given.

69.Which of the following is considered an application input control?

A.Run control total.

B.Edit check.

C.Report distribution log.

D.Exception report.

Answer (B) is correct.

An edit (field) check is an application input control that prevents invalid characters from being accepted. Some data elements can only contain certain characters, and any transaction that attempts to use an invalid character is rejected.

A.A run control total is an output control, not an application input control.

C.A report distribution log is an output control, not an application input control.

D.An exception report is a report generated on activities that lie outside predefined boundaries. It is not an application input control.

70.Which of the following types of control plans is particular to a specific process or subsystem, rather than related to the timing of its occurrence?

A.Preventive.

B.Corrective.

C.Application.

D.Detective.

Answer (C) is correct.

Application controls are built into each computer application. They are designed to ensure that only correct, authorized data enter the system, and that the data are processed properly.

A.Preventive controls are advance measures taken so that problems associated with an activity will not occur. They are not limited to a specific process or subsystem.

B.Corrective controls solve problems after they are identified by detective controls. They are not limited to a specific process or subsystem.

D.Detective controls provide post-performance feedback about whether deviations from standards have occurred. They are not limited to a specific process or subsystem.

71.Some data processing controls relate to all computer processing activities (general controls) and some relate to specific tasks (application controls). General controls include

A.Controls designed to ascertain that all data submitted to computer processing have been properly authorized.

B.Controls that relate to the correction and resubmission of data that were initially incorrect.

C.Controls for documenting and approving programs and changes to programs.

D.Controls designed to ensure the accuracy of the processing results.

Answer (C) is correct.

General controls relate to the organization's IT environment as a whole. They sustain the conditions under which application controls can function properly. Controls over programs and changes to programs are of this type.

- A. Controls designed to ascertain that all data submitted have been properly authorized are input controls, a category of application controls.
- B. Controls that relate to the correction and resubmission of data that were initially incorrect are input controls, a category of application controls.
- D. Controls designed to ensure the accuracy of processing results are output controls, another category of application controls.

72. Which of the following is a validity check?

- A. The computer ensures that a numerical amount in a record does not exceed some predetermined amount.
- B. As the computer corrects errors and data are successfully resubmitted to the system, the causes of the errors are printed out.
- C. The computer flags any transmission for which the control field value did not match that of an existing file record.
- D. After data are entered, the computer sends certain data back to the terminal for comparison with data originally sent.

Answer (C) is correct.

Validity checks test identification numbers or transaction codes for validity by comparison with items already known to be correct or authorized. For example, a validity check may identify a transmission for which the control field value did not match a pre-existing record in a file.

- A. A limit check determines whether a numerical amount exceeds a predetermined amount.
- B. An error log or error listing identifies errors that were previously detected and subsequently corrected.
- D. This action describes an older technology referred to as closed-loop verification.

73. A customer's order was never filled because an order entry clerk transposed the customer identification number while entering the sales transaction into the system. Which of the following controls would most likely have detected the transposition?

- A.Sequence test.
- B.Completeness test.
- C.Validity check.
- D.Limit test.

Answer (C) is correct.

Validity checks are tests of identification numbers or transaction codes for validity by comparison with items already known to be correct or authorized.

- A.Sequence tests determine whether records are in proper order.
- B.Completeness checks of transmission of data determine whether all necessary information has been sent.
- D.Limit tests are based on known limits for given information. For example, hours worked per week cannot exceed 168.

74.Which of the following input controls would prevent an incorrect state abbreviation from being accepted as legitimate data?

- A.Reasonableness test.
- B.Field check.
- C.Digit verification check.
- D.Validity check.

Answer (D) is correct.

Validity checks are tests of identification numbers or transaction codes for validity by comparison with items already known to be correct or authorized.

- A.Reasonableness (relationship) checks consider the logical correctness of relationships among the values of data items on an input and the corresponding master file record. For example, it may be known that employee John Smith works only in departments A, C, or D. Thus, a reasonableness check could be performed to determine that the payroll record contains one of the likely department numbers.
- B.Field checks are tests of the characters in a field to verify that they are of an appropriate type for that field. For example, the field for a Social Security number cannot contain alphabetic characters.

C. Check digit verification is used to identify incorrect identification numbers. The digit is generated by applying an algorithm to the ID number.

75. In an automated payroll processing environment, a department manager substituted the time card for a terminated employee with a time card for a fictitious employee. The fictitious employee had the same pay rate and hours worked as the terminated employee. The best control technique to detect this action using employee identification numbers is a

A. Reasonableness test.

B. Record count.

C. Hash total.

D. Financial total.

Answer (C) is correct.

A hash total is a control total without a defined meaning, such as the total of employee numbers or invoice numbers, that is used to verify the completeness of data. Thus, the hash total for the employee listing by the personnel department could be compared with the total generated during the payroll run.

A. A reasonableness test is based on known limits for given information.

B. A record count is a control total of the number of records processed during the operation of a program.

D. Financial totals summarize dollar amounts in an information field in a group of records.

76. The purpose of check digit verification of an account number on an update transaction is to

A. Verify that the account number corresponds to an existing account in the master file.

B. Detect a transposition of an account number entered into the system.

C. Ensure that supporting documentation exists for the update transaction.

D. Require the account number to have the correct logical relationship with other fields.

Answer (B) is correct.

A major control used to guard against errors made in transcribing or keying data is a check digit. A check digit is a detective control designed to establish the validity and appropriateness of numerical data elements, such as account numbers. The check digit within the code is a mathematical function of

the other digits. Recalculation of the digit tests the accuracy of the other characters in the code. Check digit verification prevents single-digit errors from leading to erroneous updates.

A. Verifying that the account number corresponds to an existing account in the master file is a master file reference check.

C. Ensuring that supporting documentation exists for update transactions is a document reconciliation control.

D. Requiring a field to have the correct logical relationship with other fields is a dependency check.

77. The risks created by rapid changes in IT have not affected which concepts of internal control?

1. Cost-benefit analysis
2. Control environment
3. Reasonable assurance
4. Management's responsibility

A. 1 and 2 only.

B. 3 and 4 only.

C. 2, 3, and 4 only.

D. 1, 2, 3, and 4.

Answer (D) is correct.

Internal control objectives remain essentially the same although technology, risks, and control methods change. Thus, many concepts of control (management's responsibility, the role of the control environment, reasonable assurance, monitoring, and cost-benefit analysis) are relevant regardless of IT changes.

A. IT control processes and procedures must provide reasonable assurance that objectives are achieved and risks are reduced. Moreover, management continues to be responsible for control and for coordinating activities to achieve objectives.

B. Cost-benefit analysis remains an essential tool for determining which controls mitigate identified risks at an acceptable cost. Furthermore, the control environment in an IT setting reflects the tone of the organization, influences control consciousness, and provides a foundation for the other components of control.

C. Cost-benefit analysis remains an essential tool for determining which controls mitigate identified risks at an acceptable cost.

78. Which of the following is not a typical output control?

A. Reviewing the computer processing logs to determine that all of the correct computer jobs executed properly.

B. Matching input data with information on master files and placing unmatched items in a suspense file.

C. Periodically reconciling output reports to make sure that totals, formats, and critical details are correct and agree with input.

D. Maintaining formal procedures and documentation specifying authorized recipients of output reports, checks, or other critical documents.

Answer (B) is correct.

Matching input data with information on master files and moving unmatched items to a suspense file is a processing control, not an output control.

A. Reviewing the computer processing logs is an output control.

C. Periodically reconciling output reports is an output control.

D. Maintaining formal procedures and documentation specifying authorized recipients of output is an output control.

79. A clerk recorded a sales invoice as US \$13.66 when the actual amount was US \$133.66. Which control should detect this error?

A. Limit check.

B. Batch input totals.

C. Redundant character check.

D. Sign check.

Answer (B) is correct.

Batch input controls for financial amounts calculate a total. It is then compared with the manually calculated total before computer processing.

A.A limit check is effective for overstatement errors.

C.A redundant character check is a hardware control that checks for accuracy in data transmission. It is not an input control.

D.A sign check looks for positive or negative field restrictions.

80.Which application controls monitor processed and stored data to ensure they are consistent and complete?

A.Integrity controls.

B.Input controls.

C.Output controls.

D.Processing controls.

Answer (A) is correct.

Integrity controls monitor data as it is processed and while it is stored to ensure that it remains consistent and complete. For example, failure of a defined data block to align with another value may indicate an error in processing.

B.Input controls are intended to prevent errors when data are entered manually or electronically into the system.

C.Output controls are detective controls that find errors and verify the accuracy and reasonableness of output data after processing is complete.

D.Processing controls ensure that data are complete and accurate during processing.

81.What is the best control to prevent entry of incorrect vendor numbers into a database?

A.Error listing.

B.Exception reporting.

C.Format checks.

D.Add a drop-down menu.

Answer (D) is correct.

An input control should prevent entry of invalid vendor numbers. If vendors are selected only from an approved list on a drop-down menu, this validity check should be effective.

- A. An error listing is an output control.
- B. Exception reporting is an output control.
- C. Format checks verify that data are entered in an acceptable layout. They cannot detect whether a vendor number is valid.

82. Within an integrated financial system, which of the following is not a major risk associated with accounts receivable?

- A. Transactions may occur with unauthorized vendors.
- B. Credits may be applied to improper accounts.
- C. Updates of credit ratings may be untimely.
- D. Financial or management reporting may be inaccurate.

Answer (A) is correct.

Transactions with unauthorized vendors is a risk associated with the accounts payable component of an integrated system. The other risks are associated with the accounts receivable component.

- B. A major risk is that customers' payments may be misapplied (credited to) the wrong accounts.
- C. A major risk is that credit may (or may not) be extended because of untimely updates of credit ratings.
- D. A major risk is that incorrect or incomplete information may result in materially misstated financial statements or poor management decisions.

83. Effective IT general controls (ITGCs) are measured by the number of which of the following?

- 1) IT systems change requests
- 2) Incidents that damage public reputation
- 3) Systems that do not meet security criteria
- 4) Violations of segregation of duties

A. 1, 2, and 3 only.

B.1, 2, and 4 only.

C.2, 3, and 4 only.

D.1, 2, 3, and 4.

Answer (C) is correct.

ITGCs apply to all systems components, processes, and data in the organization or the system environment. Ensuring systems security involves creating security policies and continuously monitoring and responding to security threats. Effective ITGCs are measured by the number of (1) incidents that damage public reputation, (2) systems that do not meet security criteria, and (3) violations of segregation of duties.

A.Measures include violations of segregation of duties but not IT systems change requests.

B.Measures include systems that do not meet security criteria but not IT systems change requests.

D.IT systems change requests do not necessarily indicate the existence of security threats.

84.A large data processing center has processing bottlenecks at peak batch processing hours. The center is sometimes unable to complete all batch processing by the start of the next business day, creating difficulties in starting online systems. When investigating this problem, the internal auditor initially should focus on controls over

A.Console logs.

B.Backup and restart procedures.

C.Job scheduling.

D.Program documentation.

Answer (C) is correct.

Controls over job scheduling for processing are essential to optimize use of computer resources and should give the best initial indication of the nature of the problem. Backup and restart procedures apply after abnormal interruptions of processing. Console logs provide only indications of problems. They might be used later in the process. Program documentation is not the place to start. It might help determine why a given program was causing a problem.

A.Console logs record only problems.

B.Backup and restart procedures are applied only after a problem has occurred. They do not suggest a cause.

D. Program documentation is not itself immediate evidence of why processing bottlenecks occurred.

85. An organization uses a database management system (DBMS) as a repository of data. The DBMS in turn supports a number of end-user-developed applications. Some of the applications update the database. In evaluating the control procedures over access and use of the database, the auditor will be most concerned that

A. End users have their read-only applications approved by data processing before accessing the database.

B. Concurrency update controls are in place.

C. End-user applications are developed and tested on personal computers before being ported to the mainframe.

D. A relational database model is adopted so that multiple users can be served at the same time.

Answer (B) is correct.

Concurrency controls manage situations in which two or more users attempt to access a file or database simultaneously. As such, the purpose of concurrency controls is to protect data integrity.

A. End-user computing frees the end user from the need to have requests approved by data processing, including end-user applications that use large mainframe databases.

C. The distinction between testing on mainframe versus personal computers is not important here.

D. Relational data models are popular but are not needed to support multiple users or end-user computing.

86. Application control objectives do not normally include assurance that

A. Authorized transactions are completely processed once and only once.

B. Transaction data are complete and accurate.

C. Review and approval procedures for new systems are set by policy and adhered to.

D. Processing results are received by the intended user.

Answer (C) is correct.

Application controls provide reasonable assurance that the recording, processing, and reporting of data are properly performed. Review and approval procedures for new systems are among the general controls known as system software acquisition and maintenance controls.

- A. An objective of application controls is that authorized transactions are completely processed once and only once.
- B. An objective of application controls is that transaction data is complete and accurate.
- D. An objective of application controls is that processing results are received by the intended user.

87. To facilitate the data entry process for form ABC, the layout on the data entry screen imitates the layout of the printed form ABC. This is an example of

- A. Format checks.
- B. Memo posting.
- C. Preformatting.
- D. Completeness checks.

Answer (C) is correct.

The preformatting of data entry screens can aid the operator in keying in the data to the correct fields. Setting up the data entry screen to imitate the printed form is an example of the preformatting of data entry screens. Preformatting is an online input control.

- A. Format checks are tests of the characters in a field to verify that they are of an appropriate type for that field. For example, the system is programmed to reject entering alphabetic characters in a number field. Format checks are an online input control.
- B. Memo posting is used by banks for financial transactions when batch processing is used. It is an intermediate step between batch processing and real-time processing.
- D. Completeness checks are a processing control that ensure all data submitted and approved are processed. Therefore, any record with missing data is rejected.

88. The data entry clerk was unable to find the customer's name when inputting the order. This is an example of

- A. Concurrency control.
- B. Validity checks.

C.Range checks.

D.Sequence checks.

Answer (B) is correct.

Validity checks compare the data entered in a given field with a table of valid values for that field. For example, the list of approved customers for credit purchases would be the table of valid values for that field. If the data entry clerk was unable to find the customer's name, then the customer may not be on the list of customers. Validity checks are an online input control.

A.Concurrency controls manage situations where two or more users attempt to access or update a file or database simultaneously. Concurrency controls are a processing control.

C.Range checks are based on known limits for given information. For example, hours worked per day must be between 1-18, with anything above that range requiring management authorization. Range or limit checks are an online input control.

D.Sequence checks are based on the logic that processing efficiency is greatly increased when files are sorted on some designated field, called the "key." If the system discovers a record out of order, it may indicate that the files were not properly prepared for processing. Sequence checks are an online input control.

89. The accounting manager was reviewing batches of journal entries for the day. One of the journal entries for a loan payment was rejected by the system. The entry was as follows:

<u>Account Name</u>	<u>Debit</u>	<u>Credit</u>
Loan Payable	US \$22,000	
Interest Expense	2,250	
Checking		\$25,000

Which online input control rejected this transaction?

A.Zero balance checks.

B.Arithmetic controls.

C.Check digits.

D.Key integrity.

Answer (A) is correct.

Zero balance checks reject any transaction or batch thereof in which the sum of all debits and credits does not equal zero. In the example provided, the debits equal US \$24,250 and the credits equal (US \$25,000). Because the sum of the debits and credits does not equal zero (US \$750), the journal entry was rejected by the system. Zero balance checks are an online input control.

B.Arithmetic controls are processing controls. Cross-footing compares an amount with the sum of its components.

C.Check digits are an online input control that includes an extra reference number following an identification code. The extra digit is input with the data and bears a mathematical relationship to the other digits. The identification code can be subjected to an algorithm and compared to the check digit(s).

D.Key integrity is a processing control. A record's key is the group of values in designated fields that uniquely identify the record. No application process should be able to alter the data in these key fields.

90.The control known as closed-loop verification would be most useful for

- A.Ensuring accurate data transmission of records.
- B.Tracking the number of payroll checks processed.
- C.Controls over network operations.
- D.Updating and verifying customer addresses.

Answer (D) is correct.

Closed-loop verification occurs when inputs by a user are transmitted to the computer, processed, and displayed back to the user for verification. Updating and verifying customer addresses would be an example of closed-loop verification. Closed-loop verification is an online input control.

A.Hardware controls, such as parity checks, are built into the equipment by the manufacturer to ensure data integrity. They ensure the proper handling of data as they are moved and stored. Parity checks ensure the accurate transmission of data.

B.Record counts track the number of records processed by the system for comparison to the number that the user expected to be processed. Record counts, such as tracking the number of payroll checks processed, are a batch input control.

C.General controls are the umbrella under which the IT function operates. They affect the organization's entire processing environment and commonly include controls over data center and network operations.

91.All of the following are correct statements regarding big data except

A.Big data is an evolving term that describes any voluminous amount of structured, semi-structured, and unstructured data that has the potential to be mined for information.

B.Big data includes information collected from social media, data from Internet-enabled devices, machine data, video, and voice recordings. The information collected is converted from high-density data into low-density data.

C.Big data is often characterized by the “4 Vs” - volume, variety, velocity, and veracity.

D.Big data processes data with analytic and algorithmic tools to reveal meaningful information.

Answer (B) is correct.

Big data includes information collected from social media, data from Internet-enabled devices, machine data, video, and voice recordings. The information collected is converted from low-density data into high-density data. Thus, the statement regarding big data is not correct.

A.Big data is an evolving term that describes any voluminous amount of structured, semi-structured, and unstructured data that has the potential to be mined for information is a correct statement about big data.

C.Big data is often characterized by the “4 Vs” - volume, variety, velocity, and veracity.

D.

Big data processes data with analytic and algorithmic tools to reveal meaningful information.

92.Which of the following best describes unstructured data?

A.Data with a high level of organization.

B.Data systematically stored with markers to enforce hierarchies of records and fields within the data.

C.Information that is not organized in a pre-defined manner (e.g., text-heavy facts, dates, numbers, and images).

D.Conforms with the organization of data models associated with relational databases.

Answer (C) is correct.

Unstructured data refers to information that is not organized in a pre-defined manner (e.g., text-heavy facts, dates, numbers, and images).

A.Structured data refers to data with a high level of organization.

B.Semi-structured data does not conform with the formal structure of data models associated with relational databases or other forms of data tables; however, markers exist to enforce hierarchies of records and fields within the data.

D.Structured data conforms with the organization of data models associated with relational databases.

93.All of the following represents a characteristic of big data except

A.Size.

B.Mixture.

C.Speed.

D.Uniformity.

Answer (D) is correct.

Big data is often characterized by the “4 Vs” - volume, variety, velocity, and veracity. Thus, uniformity is not a characteristic of big data.

A.Size is a characteristic of big data.

B.Mixture is a characteristic of big data.

C.Speed is a characteristic of big data.

94.Which of the following are key technologies of big data?

I. In-memory analytics

II. Data mining

III. Text mining

A.I only.

B.II only.

C.I and III only.

D.I, II, and III.

Answer (D) is correct.

Key technologies of big data include data mining, text mining, data management, in-memory analytics, predictive analytics, and Hadoop.

- A.Key technologies of big data also include data mining and text mining.
- B.Key technologies of big data also include in-memory analytics and text mining.
- C.Key technologies of big data also include data mining.

95.Which of the following is a correct statement regarding in-memory analytics?

- A.It is an open source software framework that stores large amounts of data and runs applications on clusters of commodity hardware.
- B.It analyzes data from system memory instead of hard drives.
- C.It is a technology that uses data, statistical algorithms, and machine-learning techniques to identify the likelihood of future outcomes based on historical data.
- D.It examines large amounts of data to discover patterns in the data.

Answer (B) is correct.

In-memory analytics analyzes data from system memory instead of hard drives.

- A.Hadoop is an open source software framework that stores large amounts of data and runs applications on clusters of commodity hardware.
- C.Predictive analytics is technology that uses data, statistical algorithms, and machine-learning techniques to identify the likelihood of future outcomes based on historical data.
- D.Data mining examines large amounts of data to discover patterns in the data.

96.All of the following are correct statements regarding big data except

- A.Big data needs to be transformed to “Smart Data.” Collecting large amounts of statistics and numbers translates into minimal benefit if there is no layer of added intelligence.
- B.Big data uses inductive statistics and concepts from nonlinear system identification (e.g., output is not directly proportional to the input) to infer laws from large sets of data to reveal relationships and dependencies, or to perform predictions of outcomes and behaviors.
- C.Big data analytic tools complete missing pieces through data fusion, which is the process of integration of multiple data and knowledge representing the same real-world object into a consistent, accurate, and useful representation.
- D.Big data is an evolving term that describes any voluminous amount of structured data that has the potential to be mined for information.

Answer (D) is correct.

Big data is an evolving term that describes any voluminous amount of structured, semi-structured, and unstructured data that has the potential to be mined for information. Thus, the statement is incorrect because big data includes semi-structured and unstructured data in addition to structured data.

A. Big data needs to be transformed to “Smart Data.” Collecting large amounts of statistics and numbers translates into minimal benefit if there is no layer of added intelligence is a correct statement regarding big data.

B. Big data uses inductive statistics and concepts from nonlinear system identification (e.g., output is not directly proportional to the input) to infer laws from large sets of data to reveal relationships and dependencies, or to perform predictions of outcomes and behaviors is a correct statement regarding big data.

C. Big data analytic tools complete missing pieces through data fusion, which is the process of integration of multiple data and knowledge representing the same real-world object into a consistent, accurate, and useful representation is a correct statement regarding big data.

97. All of the following are correct statements regarding businesses deciding to utilize cloud computing for big data projects except

A. Businesses are hesitant to invest in an extensive server and storage infrastructure that might only be used occasionally to complete big data tasks.

B. Businesses only pay for the storage and computing time actually used.

C. A public cloud provider can store petabytes of data and scale up thousands of servers just long enough to accomplish the big data project.

D. Analysts are not required to have a detailed understanding of the available data and possess some sense of what answer(s) they’re looking for.

Answer (D) is correct.

Analysts are not required to have a detailed understanding of the available data and possess some sense of what answer(s) they’re looking for is an incorrect statement. Analysts must have a detailed understanding of the available data and possess some sense of the answers they are looking for. The value of data is only as valuable as the business outcomes it makes possible. It is how businesses make use of data that allows full recognition of its true value and the potential to improve decision-making capabilities and measure them against the results of positive business outcomes.

A. Businesses are hesitant to invest in an extensive server and storage infrastructure that might only be used occasionally to complete big data tasks.

B. Businesses only pay for the storage and computing time actually used.

C. A public cloud provider can store petabytes of data and scale up thousands of servers just long enough to accomplish the big data project.

98. Quantifiable measures that demonstrate an organization's progress towards its goals and objectives are referred to as

A. Normalization of data.

B. Veracity-based value.

C. Data visualization.

D. Key performance indicators.

Answer (D) is correct.

Key performance indicators (KPI) are quantifiable measures used by organizations to track progress towards its goals and objectives. Clearly defined goals and objectives assist the IT team with selecting the most appropriate technology source for the analysis. Early adoption of goals and KPIs help keep the analysis on course and avoid worthless analysis. Current ratio, net profit margin, budget variance, debt to equity ratio, and payment error rate are examples of KPIs.

A. Cleaning or normalizing data consists of, but is not limited to, flushing out useless information and identifying missing data.

B. Veracity refers to the trustworthiness of the data. Veracity-based value is the transformation of validated data to "smart data." Collecting large amounts of data is of little value if the data cannot be relied upon and used.

C. Data visualization or graphic illustrations (e.g., charts, graphs, network analysis, etc.) are good ways to emphasize information. Using visual aids to support a discussion of major points results in the most retention of information.

99. An organization's primary focus is on what it needs to do in order to accomplish its predicted future. Which of the following data analytics methods would best address this concern?

A. Predictive analysis.

B. Prescriptive analysis.

C. Anomaly detection.

D. Network analysis.

Answer (B) is correct.

Prescriptive analysis concentrates on what an organization needs to do in order for the predicted future results to actually occur and therefore addresses this concern.

A. Predictive analysis involves applying assumptions to data and predicting future results.

C. Anomaly detection is used to identify unusual patterns or deviations from the norm or expected results.

D. Network analysis consists of analyzing network data and statistics to find patterns.

100. Which of the following data analytics methods should an auditor use to report on actual results?

A. Descriptive analysis.

B. Information discovery.

C. Text analysis.

D. Diagnostic analysis.

Answer (A) is correct.

Descriptive analysis is the most basic and commonly used data analytics method and concentrates on the reporting of actual results.

B. Information discovery is not a data analytics method. It refers to obtaining relevant data for analysis and is the second stage of the data analytics process. Access to every piece of data available allows for valuable analysis, more precise correlations, construction of meaningful analysis models and forecasts, and identification of actionable insights.

C. Text analysis involves the utilization of text mining and natural language algorithms to find patterns in unstructured text.

D. Diagnostic analysis provides insight on the reason certain results occurred.

PART 3 UNIT 8

1. Which of the following would not be appropriate to consider in the physical design of a data center?

- A. Evaluation of potential risks from railroad lines and highways.
- B. Use of biometric access systems.
- C. Design of authorization tables for operating system access.
- D. Inclusion of an uninterruptible power supply system and surge protection.

Answer (C) is correct.

Authorization tables for operating system access address logical controls, not physical controls.

- A. External risks should be evaluated to determine the center's location.
- B. Biometric access systems control physical access to the data center. These devices identify such unique physical qualities as fingerprints, voice patterns, and retinal patterns.
- D. Power supply systems and surge protection are included in data center design. Thus, two separate power lines, line conditioning equipment, and backup power are typical elements in the design.

2. An Internet firewall is designed to provide adequate protection against which of the following?

- A. A computer virus.
- B. Unauthenticated logins from outside users.
- C. Insider leaking of confidential information.
- D. A Trojan horse application.

Answer (B) is correct.

A firewall is a combination of hardware and software that separates two networks and prevents passage of specific types of network traffic while maintaining a connection between the networks. Generally, an Internet firewall is designed to protect a system from unauthenticated logins from outside users, although it may provide several other features as well.

- A. A firewall cannot adequately protect a system against computer viruses.
- C. Industrial spies need not leak information through the firewall. A telephone or flash drive are much more common means of sharing confidential information.
- D. A firewall cannot adequately protect against a Trojan horse (a program, such as a game, that appears friendly but that actually contains applications destructive to the computer system) or any other program that can be executed in the system by an internal user.

3. Authentication is the process by which the

- A. System verifies that the user is entitled to enter the transaction requested.
- B. System verifies the identity of the user.
- C. User identifies himself or herself to the system.
- D. User indicates to the system that the transaction was processed correctly.

Answer (B) is correct.

Identification is the process of uniquely distinguishing one user from all others. Authentication is the process of determining that individuals are who they say they are. For example, a password may identify but not authenticate its user if it is known by more than one individual.

- A. Authentication involves verifying the identity of the user. This process does not necessarily confirm the functions the user is authorized to perform.
- C. User identification to the system does not imply that the system has verified the identity of the user.
- D. This procedure is an application control for accuracy of the transaction.

4. Which of the following issues would be of most concern to an auditor relating to an organization's Internet security policy?

- A. Auditor documentation.

- B. System efficiency.
- C. Data integrity.
- D. Rejected and suspense item controls.

Answer (C) is correct.

Controls are intended to ensure the integrity, confidentiality, and availability of information. An auditor relies on the integrity of the system's data and programs in making critical decisions throughout the audit process.

- A. Auditor documentation is not as crucial as data integrity.
- B. Efficiency does not affect the basis for critical auditor decisions using information provided by the system.
- D. Rejected and suspense item controls represent a portion of the techniques used to ensure data integrity.

5. Passwords for personal computer software programs are designed to prevent

- A. Inaccurate processing of data.
- B. Unauthorized access to the computer.
- C. Incomplete updating of data files.
- D. Unauthorized use of the software.

Answer (D) is correct.

The use of passwords is an effective control in an online system to prevent unauthorized access to computer files. Lists of authorized users are maintained in the computer. The entry of passwords or ID numbers; a prearranged act of personal questions; and use of badges, magnetic cards, or optically scanned cards may be combined to avoid unauthorized access.

- A. Passwords concern authorization, not accuracy of data.
- B. Passwords do not prevent physical access to the computer.
- C. Passwords concern authorization, not completeness of data.

6. An auditor has just completed a physical security audit of a data center. Because the center engages in top-secret defense contract work, the auditor has chosen to recommend biometric authentication for workers entering the building. The recommendation might include devices that verify all of the following except

- A. Fingerprints.
- B. Retina patterns.
- C. Speech patterns.
- D. Password patterns.

Answer (D) is correct.

Biometric technologies are automated methods of establishing an individual's identity using physiological or behavioral traits. These characteristics include fingerprints, retina patterns, hand geometry, signature dynamics, speech, and keystroke dynamics.

- A. Authentication using fingerprints is a biometric measure.
- B. Authentication using retina patterns is a biometric measure.
- C. Authentication using speech patterns is a biometric measure.

7. Which of the following security controls would best prevent unauthorized access to sensitive data through an unattended data terminal directly connected to a mainframe?

- A. Use of a screen saver with a password.
- B. Use of workstation scripts.
- C. Encryption of data files.
- D. Automatic log-off of inactive users.

Answer (D) is correct.

Automatic log-off of inactive users is a utility that disconnects a data terminal from the mainframe or server after a certain amount of time. Once the workstation has been disconnected, the user must log back into the system.

- A. A screen saver is software used to prevent the burning of an image onto the monitor's screen.
- B. Workstation scripts would not necessarily prevent unauthorized access.
- C. Data is only encrypted when stored in a file. While the data or file is being modified by a user, the data is not encrypted. Thus, an unattended data terminal would leave data susceptible to unauthorized access.

8. Which of the following is an objective of logical security controls for information systems?

- A. To ensure complete and accurate recording of data.
- B. To ensure complete and accurate processing of data.
- C. To restrict access to specific data and resources.
- D. To provide an audit trail of the results of processing.

Answer (C) is correct.

The primary objective of security controls for information systems is to restrict access to data and resources (both hardware and software) to only authorized individuals.

- A. Ensuring complete and accurate recording of data is an input control objective
- B. Ensuring complete and accurate processing of data is a control objective.
- D. Providing an audit trail is not an objective of logical security control.

9. Assigning passwords to computer users is a control to prevent unauthorized access. Because a password does not conclusively identify a specific individual, it must be safeguarded from theft. A method used to protect passwords is to

- A. Require that they be displayed on computer screens but not printed on hard copy output.
- B. Set maximum character lengths.
- C. Require passwords to be changed periodically.
- D. Eliminate all records of old passwords.

Answer (C) is correct.

Security measures include changing passwords frequently, that is, establishing a relatively short maximum retention period; not displaying or printing passwords; setting minimum lengths; prohibiting the use of certain words, character strings, or names; mandating a minimum retention period so users cannot promptly change passwords back to their old and convenient values; and retaining old passwords to prevent their use.

- A. A password should not be displayed.
- B. A minimum length requirement is more likely.
- D. Retention of old passwords prevents their reuse.

10. The best source of evidence to determine if ex-employees continue to have access to a company's computer systems is

- A. Discussing the password removal process with the information security officer.
- B. Reviewing computer logs of access attempts.
- C. Reconciling current payroll lists with database access lists.
- D. Reviewing access control software to determine whether the most current version is implemented.

Answer (C) is correct.

To determine if ex-employees are accessing the company's computer systems, the auditor should obtain the log showing system accesses. This log should be compared with current payroll lists to see if anyone not on the payroll is still accessing or is able to access the systems.

- A. Discussing the password removal process does not determine whether ex-employees are still using or are able to use their passwords to access the systems.
- B. The computer logs should be compared with current payroll lists.
- D. Reviewing the access control software does not indicate whether ex-employees can access or are accessing the systems.

11. Computer program libraries should be kept secure by

- A. Installing a logging system for program access.
- B. Monitoring physical access to program library media.
- C. Restricting physical and logical access.
- D. Denying remote access via terminals.

Answer (C) is correct.

An important operating control is to establish a library to preclude misplacement, misuse, or theft of data files, programs, and documentation. A librarian should perform this custodianship function and be appropriately accountable. Restricting physical and logical access secures programs from unauthorized use, whether in person or remotely via terminals.

- A. Installing a logging system for program access would permit detection of unauthorized access but not prevent it.
- B. Monitoring physical access to program library media would control only unauthorized physical access.
- D. Denying all remote access via terminals would likely be inefficient and would not secure program libraries against physical access.

12. Data access security related to applications may be enforced through all of the following except

- A. User identification and authentication functions incorporated in the application.
- B. Utility software functions.
- C. User identification and authentication functions in access control software.
- D. Security functions provided by a database management system.

Answer (B) is correct.

Utility programs perform routine functions (e.g., sorting and copying), are available to all users, and are promptly available for many different applications. Utility programs are one of the more serious weaknesses in data access security because some can bypass normal access controls.

- A. Although there is a migration of control of this type away from applications to other software, the large bulk of these controls still reside in application software.
- C. Access control software has as one of its primary objectives improving data access security for all data on the system.
- D. Most database management systems provide for improved data access security while they are running.

13. Which implemented control would best assist in meeting the control objective that a system have the capability to hold users accountable for functions performed?

- A. Programmed cutoff.
- B. Redundant hardware.
- C. Activity logging.
- D. Transaction error logging.

Answer (C) is correct.

Activity logging provides an audit trail of user activity

- A. Programmed cutoff controls mitigate the risk of recording transactions in the wrong period.
- B. Programmed cutoff controls mitigate the risk of recording transactions in the wrong period.
- D. Transaction error logging controls transactions rather than user terminal activity.

14. Which new issues associated with rapidly advancing computer technology create new risk exposures for organizations?

- A. Changes in organizational reporting requirements and controls over computer abuse.
- B. Controls over library tape procedures.
- C. Complexity of operating systems and controls over privacy of data.
- D. Changes in organizational behavior.

Answer (C) is correct.

Advancing computer technology presents more complex audit environments. With the advent of systems that permit remote access, the risk that unauthorized parties may obtain or tamper with important information is increased.

- A. Changes in organizational reporting requirements are not new issues related to advancing computer technology.
- B. Controls over library tape procedures have not been materially changed by advancing computer technology.
- D. Changes in organizational behavior are not directly associated with auditor responsibilities in advancing technology.

15. Which of the following is an important senior management responsibility with regard to information systems security?

- A. Assessing exposures.
- B. Assigning access privileges.
- C. Identifying ownership of data.
- D. Training employees in security matters.

Answer (A) is correct.

Senior management is responsible for risk assessment, including identification of risks and consideration of their significance, the likelihood of their occurrence, and how they should be managed. Senior management is also responsible for establishing organizational policies regarding computer security and implementing a compliance structure. Thus, senior management should assess the risks to the integrity, confidentiality, and availability of information systems data and resources.

- B. Assignment of access privileges is the responsibility of security management.
- C. Determining ownership of data is the responsibility of security management. In this context, ownership of data or resources means responsibility for ultimate use or disposition.
- D. Training employees in security matters is the responsibility of security management.

16. Management's enthusiasm for computer security seems to vary with changes in the environment, particularly the occurrence of other computer disasters. Which of the following concepts should be addressed when making a comprehensive recommendation regarding the costs and benefits of computer security?

1. Potential loss if security is not implemented
2. Probability of occurrences
3. Cost and effectiveness of the implementation and operation of computer security

- A. 1 only.
- B. 1 and 2 only.
- C. 3 only.
- D. 1, 2, and 3.

Answer (D) is correct.

Potential loss is the amount of dollar damages associated with a security problem or loss of assets. Potential loss times the probability of occurrence is an estimate (expected value) of the exposure associated with lack of security. It represents a potential benefit associated with the implementation of security measures. To perform a cost-benefit analysis, the costs should be considered. Thus, all three items need to be addressed.

- A.Potential loss, the probability thereof, and the cost and effectiveness of security measures are important elements of the analysis.
- B.Potential loss, the probability thereof, and the cost and effectiveness of security measures are important elements of the analysis.
- C.Potential loss, the probability thereof, and the cost and effectiveness of security measures are important elements of the analysis.

17.Which of the following statements is(are) true regarding the Internet as a commercially viable network?

- 1) Organizations must use firewalls if they wish to maintain security over internal data.
- 2) Companies must apply to the Internet to gain permission to create a home page to engage in electronic commerce.
- 3) Companies that wish to engage in electronic commerce on the Internet must meet required security standards established by the coalition of Internet providers.

- A.1 only.
- B.2 only.
- C.3 only.
- D.1 and 3.

Answer (A) is correct.

Companies that wish to maintain adequate security must use firewalls to protect data from being accessed by unauthorized users. A network firewall prevents intrusion to the network by outside parties.

- B.Anyone can establish a home page on the Internet, and no coalition of Internet providers dictates security standards.
- C.The lack of such standards is a major problem with the Internet.
- D.While it is true that organizations must use firewalls, the lack of required security standards is a major problem with the Internet.

18.When a client's accounts payable computer system was relocated, the administrator provided support through a dial-up connection to a server. Subsequently, the administrator left the company. No changes were made to the accounts payable system at that time. Which of the following situations represents the greatest security risk?

- A.User passwords are not required to be in alpha-numeric format.
- B.Management procedures for user accounts are not documented.
- C.User accounts are not removed upon termination of employees.
- D.Security logs are not periodically reviewed for violations.

Answer (C) is correct.

Access to an entity's data by unauthorized individuals presents a major security risk. The single most important policy is that which governs the information resources to which individuals have access and how the level of access will be tied to their job duties. One provision of the policy must be for the immediate removal of terminated employees' access to the system.

- A.Weak passwords do represent a security risk. However, weak passwords still do provide some protection and are therefore not the greatest security risk.
- B.Management procedures should be documented, but there is not a great security risk if the procedures are not documented.
- D.Security logs should be periodically reviewed for violations, but there are usually other controls in place to prevent violations. Thus, failing to review security logs is not the greatest security risk.

19.What is the primary objective of data security controls?

- A.To establish a framework for controlling the design, security, and use of computer programs throughout an organization.
- B.To ensure that storage media are subject to authorization prior to access, change, or destruction.

- C.To formalize standards, rules, and procedures to ensure the organization's controls are properly executed.
- D.To monitor the use of system software to prevent unauthorized access to system software and computer programs.

Answer (B) is correct.

The primary objective of data security is to protect data. This includes ensuring that storage media are subject to authorization prior to access, change, or destruction.

- A.The primary objective of data security controls is to protect data, not to establish a framework for controlling the design, security, and use of computer programs.
- C.The primary objective of data security controls is to protect data, not to formalize standards, rules, and procedures to ensure the controls are properly executed.
- D.The primary objective of data security controls is to protect data, not to monitor the use of system software.

20.Which of the following is an electronic device that separates or isolates a network segment from the main network while maintaining the connection between networks?

- A.Query program.
- B.Firewall.
- C.Image browser.
- D.Keyword.

Answer (B) is correct.

A firewall is a combination of hardware and software that separates an internal network from an external network (e.g., the Internet) and prevents passage of specific types of traffic.

- A.A query program is designed to enable a user to read, update, reorganize, and report data contained in a relational database.
- C.An image browser functions as a viewing tool, able to handle available graphics file formats.
- D.A keyword is an identification tool in a computer language which refers to a specific command.

21.Dora Jones, an auditor for Farmington Co., noted that the Acme employees were using computers connected to Acme's network by wireless technology. On her next visit to Acme, Jones brought one of Farmington's laptop computers with a wireless network card. When she started the laptop to begin work, Jones noticed that the laptop could view several computers on Acme's network and that she had access to Acme's network files. Which of the following statements is the most likely explanation?

- A.Acme's router was improperly configured.
- B.Farmington's computer had the same administrator password as the server.
- C.Jones had been given root account access on Acme's computer.
- D.Acme was not using security on the network

Answer (D) is correct.

A secure network prevents a user from having unauthorized access. Given wireless technology, anyone with wireless capacity can access the network in the absence of security. Thus, Acme's network was not protected by passwords or other security features to prevent unauthorized access.

- A.The router controls the forwarding of data packets along networks. It does not affect whether a user can access computers and files.
- B.The probability of having the same administrator password as the server is very remote.
- C.Root access on Acme's computer would not permit Jones to access Acme's files and computers. Root account access allows a user complete access only to a particular computer, not to the network.

22.Which of the following passwords would be most difficult to crack?

- A.O?Ca!FISi
- B.language

C.12 HOUSE 24
D.pass56word

Answer (A) is correct.

To be effective, passwords should consist of random letters, symbols, and numbers and should not contain words or phrases. Accordingly, computer system users should avoid employing words for or in their passwords.

- B.A password should never consist of a recognizable word by itself.
- C.A password should never consist of a recognizable word by itself.
- D.This password is a relatively secure one, but not as secure as O?Ca!FISi

23.A client installed sophisticated controls using the biometric attributes of employees to authenticate user access to the computer system. This technology most likely replaced which of the following controls?

- A.Use of security specialists.
- B.Reasonableness tests.
- C.Passwords.
- D.Virus protection software.

Answer (C) is correct.

The use of passwords is an effective control in an online system to prevent unauthorized access to computer systems. However, biometric technologies are more sophisticated and difficult to compromise.

- A.Biometric technologies do not eliminate the need for specialists who evaluate and monitor security needs.
- B.Reasonableness tests are related to input controls, not access controls.
- D.Virus protection software prevents damage to data in a system, not access to a system.

24.Which of the following is a password security problem?

- A.Users are assigned passwords when accounts are created but do not change them.
- B.Users have accounts on several systems with different passwords.
- C.Users copy their passwords on note paper, which is kept in their wallets.
- D.Users select passwords that are not listed in any online dictionary.

Answer (A) is correct.

Proper user authentication by means of a password requires password-generating procedures to assure that valid passwords are known only by the proper individuals. If passwords are assigned, users should change passwords frequently so that they are the only persons with access under those identifiers.

- B.No security issue arises when different passwords are used for accounts on different systems.
- C.Storing a password online would be a greater problem.
- D.Ideally, passwords should not be actual words.

25.Which of the following statements best characterizes the function of a physical access control?

- A.Protects systems from the transmission of Trojan horses.
- B.Provides authentication of users attempting to log into the system.
- C.Separates unauthorized individuals from computer resources.
- D.Minimizes the risk of incurring a power or hardware failure.

Answer (C) is correct.

Physical security controls limit physical access and protect against environmental risks and natural catastrophes, such as fire and flood. For example, keypad devices and magnetic card readers can be used to deny unauthorized persons access to the computer center.

- A. An organization-wide network security policy that includes protections against viruses and other malicious software protects systems from the transmission of Trojan horses. Physical access control does not.
- B. Logical security control (e.g., passwords and ID numbers) provides authentication of users attempting to log into the system.
- D. A disaster recovery and business continuity plan minimizes the risk of incurring a power or hardware failure. For example, it may provide for fully protected or fault-tolerant systems.

26. Which of the following statements presents an example of a general control for a computerized system?

- A. Limiting entry of sales transactions to only valid credit customers.
- B. Creating hash totals from Social Security numbers for the weekly payroll.
- C. Restricting entry of accounts payable transactions to only authorized users.
- D. Restricting access to the computer center by use of biometric devices.

Answer (D) is correct.

General controls relate to the organization's information systems environment as a whole. Physical controls that limit physical access to computer equipment, data, and important documents (i.e., biometric devices) are an example of general controls.

- A. Limiting entry of sales transactions to only valid credit customers is an application control because it relates to a specific task performed by a system.
- B. Creating hash totals from Social Security numbers for the weekly payroll is an output control because it provides assurance that the processing result is accurate.
- C. Restricting entry of accounts payable transactions to only authorized users is an application control because it relates to a specific task performed by a system.

27. Innovations in IT increase the importance of risk management because

- A. The objective of complete security is becoming more attainable.
- B. Information system security is continually subject to new threats.
- C. Closed private systems have proliferated.
- D. Privacy is a concern for only a very few users.

Answer (B) is correct.

Advances in technology bring new capabilities and, along with them, new vulnerabilities. Because information system security is continually subject to new threats, that is, to new risks and exposures, risk assessment and management must be a continual process.

- A. Perfect security is not feasible. One reason is that system access cannot be eliminated.
- C. Internet connectivity has tended to reduce the prevalence of closed private systems.
- D. Privacy was an expectation of people everywhere before the innovations in IT led to the globalization of e-business via the Internet. Thus, risk management has increased in importance in part because those innovations created new threats to the privacy of personal information. As such, organizations must, for example, meet statutory requirements for safeguarding the personal information of customers.

28. Prearranged sets of personal questions are used to reset passwords. Inactive users are automatically logged off. These are examples of which type of IT controls?

- A. Hardware.
- B. Logical.
- C. Input.
- D. Processing.

Answer (B) is correct.

Logical access controls ensure that only those persons with a bona fide purpose and authorization have access to computer systems.

- A. Hardware controls are built into physical equipment by the manufacturer to detect and report hardware error or failure. The examples in the question are software controls.
- C. Input controls are applied to data manually or electronically entered into the system. Input controls are application controls, not access controls.
- D. Processing controls ensure that data are complete and accurate during updating. Processing controls are application controls, not access controls.

29. Which of the following is a false statement about data security?

- A. Data structure standards should be consistent to ensure uniform inter-application security.
- B. It is safer to store data on a hard drive than on a common server.
- C. It is important to delete all of the files on the hard disk drive when the entity disposes of its computers.
- D. To ensure data security, all changes in computer systems are logged to provide an audit trail.

Answer (B) is correct.

Servers are more likely to be regularly backed up. Thus, it is safer to store data on a common server.

- A. Data structure standards are rules for consistency of data definitions, or the programming tags that define a data item's use and its place in a data hierarchy. If all applications use the same data standards, seamless interfaces can be created and security controls uniformly applied.
- C. When an entity sells its computers, special utilities must be used to erase the data fully and protect its confidential information.
- D. To ensure data security, (1) only authorized users can access a system, (2) their access is restricted by user role, (3) unauthorized access is denied, and (4) all changes to computer systems are logged to provide an audit trail.

30. Which of the following statements is most accurate regarding the data security of an online computer system protected by an internal user-to-data access control program?

- A. Security depends on the controls over the issuance of user IDs and user authentication.
- B. Access to data is controlled by restricting specific applications to specific files.
- C. Access to data is controlled by restricting specific terminals to specific applications.
- D. The use of this type of access control software eliminates any significant control weaknesses.

Answer (A) is correct.

The effective administration of user IDs and authentication procedures is the key to enforcing personal accountability, the basis for user-to-data authorization. The use of access software alone does not address all access security risks.

- B. A program that restricts specific applications to certain fields is not user-access based.
- C. A program that restricts specific terminals to certain applications is not user-access based.
- D. User IDs and authentication procedures may be compromised in many ways.

31. An organization creates an audit trail of when employees enter the building by having them use a key card to release a magnetic lock. A database records who enters when. Which of the following reduces the risk that the audit trail is incomplete?

- A. Installing a redundant character check for card verification.
- B. Policy prohibiting employees from allowing other employees to enter without using their own key card.
- C. Have the back door operate via a physical key lock and providing the key only to certain employees.
- D. Installing the key card matching database server near the door.

Answer (B) is correct.

Piggybacking is one person's use of another person's means of authentication of access to a physical facility, an online system, a particular device, an application, specific data, etc. A specific, consistently enforced policy prohibiting piggybacking should reduce but cannot eliminate the practice.

- A. Installing a redundant character check for card verification does not prevent a person from using another person's card.
- C. Piggybacking includes the practice of physically following someone through a door to avoid using a key card. The person's entry would not be logged in the database, so the audit trail would be incomplete.
- D. Installing the key card matching database server near the door does not prevent a person from using another person's card.

32. Before implementing IT controls (general and application) and policies, an organization should

- A. Define how it will manage data internally and share it with external partners.
- B. Hire and train necessary personnel.
- C. Design the information system infrastructure.
- D. Develop an audit policy.

Answer (A) is correct.

Before a control framework can be defined, controls set, and policies defined, the organization must consider how it must use information, based on its information and business strategies.

- B. An organization should hire and train necessary personnel only after defining how it will manage data internally and share it with external partners.
- C. An organization should design the information system infrastructure only after defining how it will manage data internally and share it with external partners.
- D. An organization should develop an audit policy only after defining how it will manage data internally and share it with external partners.

33. Which of the following is a limitation of firewalls?

- A. They cannot be configured.
- B. A personal modem could be used to circumvent a firewall.
- C. They cannot be used as legal audit evidence due to their inability to store data.
- D. Trojan horses can easily get directly past a firewall by appearing to be valid files.

Answer (B) is correct.

Firewalls can be configured incorrectly. They also can be circumvented by using a personal modem.

- A. Firewalls can be configured.
- C. This is not a limitation of a firewall.
- D. This is not a limitation of a firewall.

34. Which of the following will not reduce risk associated with illegal access to an organization's network through the Internet?

- A. Requiring the use of data encryption for all transmitted files.
- B. Establishing a series of computers to serve as system firewalls.
- C. Configuring routers to accept only predefined Internet protocol addresses.
- D. Using token ring technology for local area networks.

Answer (D) is correct.

A local area network (LAN) connects devices within an organization and allows them to communicate with each other. Token ring technology merely facilitates communication across the LAN. It does not reduce the risk of illegal access to an organization's network through the Internet.

- A. Using data encryption for all transmitted files reduces the risk of illegal access to an organization's network through the Internet.
- B. System firewalls separate an internal network from an external network and therefore reduce the risk of illegal access to an organization's network through the Internet.
- C. Configuring routers to accept only predefined Internet protocol addresses reduces the risk of illegal access to an organization's network through the Internet.

35. Which of the following statements is incorrect regarding information security and cybersecurity?

- A. Cybersecurity is information security applied to computer hardware, software, and networks.
- B. Standards associated with information security and cybersecurity include de facto and de jure types.
- C. Availability of data is one of the objectives of information security and cybersecurity.
- D. Information security and cybersecurity are commonly viewed as synonymous terms; however, cybersecurity is more expansive than information security.

Answer (D) is correct.

Information security and cybersecurity are commonly viewed as synonymous terms; however, information security is more expansive than cybersecurity. Information security involves securing data in any form (e.g., locking paper documents in filing cabinets and file storage rooms and storing electronic data on IT equipment), whereas cybersecurity concentrates on protecting electronic data.

- A. Cybersecurity is information security applied to computer hardware, software, and networks.
- B. Standards assist the implementation of policies by detailing what actions must occur to comply with policy. Standards are categorized as de facto standards and de jure standards.
- C. The main objectives of information security and cybersecurity are safeguarding against unauthorized access to data (paper or electronic form) and maintaining the integrity and availability of the data.

36. The basis of effective information security and cybersecurity are

- A. De facto standards.
- B. Policies.
- C. De jure standards.
- D. Procedures.

Answer (B) is correct.

Policies form the foundation of effective information security and cybersecurity measures. The successful planning, design and implementation of security procedures are initiated by strong policies and management support. Policies govern how to resolve issues and the use of IT infrastructure to resolve issues.

- A. Standards assist the implementation of policies by detailing what actions must occur to comply with policy. Standards are categorized as de facto and de jure. De facto standards are informal standards that have been widely adopted and accepted.
- C. De jure standards are formal standards that have been assessed, approved, and sanctioned. Standards assist the implementation of policies by detailing what actions must occur to comply with policy. Standards are categorized as de facto and de jure.
- D. Guidelines and procedures illustrate how to comply with policies by providing detailed instructions.

37. A controller became aware that a competitor appeared to have access to the company's pricing information. The internal auditor determined that the leak of information was occurring during the electronic transmission of data from branch offices to the head office. Which of the following controls would be most effective in preventing the leak of information?

- A. Asynchronous transmission.
- B. Encryption.
- C. Use of fiber-optic transmission lines.
- D. Use of passwords.

Answer (B) is correct.

Encryption software uses a fixed algorithm to manipulate plain text and an encryption key (a set of random data bits used as a starting point for application of the algorithm) to introduce variation. Although data may be accessed by tapping into the transmission line, the encryption key is necessary to understand the data being sent.

A. Asynchronous transmission is a method of data transmission, not a means of safeguarding data. It is used for slow, irregular transmissions, such as from a keyboard terminal. Each character is marked by a start and stop code.

C. Although fiber-optic transmission lines are difficult to tap, their use will not prevent theft of unencrypted data by someone who has access to them.

D. Use of passwords will control access at the sending location and the head-office computer. However, passwords will not prevent someone from tapping the transmission line.

38. The use of message encryption software

A. Guarantees the secrecy of data.

B. Requires manual distribution of keys.

C. Increases system overhead.

D. Reduces the need for periodic password changes.

Answer (C) is correct.

Encryption software uses a fixed algorithm to manipulate plain text and an encryption key (a set of random data bits used as a starting point for application of the algorithm) to introduce variation. The machine instructions necessary to encrypt and decrypt data constitute system overhead. As a result, processing speed may be slowed.

A. No encryption approach absolutely guarantees the secrecy of data.

B. Keys may also be distributed electronically via secure key transporters

D. Periodic password changes are needed. Passwords are the typical means of validating users' access to unencrypted data.

39. Which of the following is an encryption feature that can be used to authenticate the originator of a document and ensure that the message is intact and has not been tampered with?

A. Heuristic terminal.

B. Perimeter switch.

C. Default settings.

D. Digital signatures.

Answer (D) is correct.

Businesses and others require that documents sent over the Internet be authentic. To authenticate a document, a company or other user may transmit a complete plaintext document along with an encrypted portion of the same document or another standard text that serves as a digital signature. If the plaintext document is tampered with, the two will not match.

A. The term "heuristic terminal" is not meaningful in this context.

B. The term "perimeter switch" is not meaningful in this context.

C. In a computer program, a default setting is a value that a parameter will automatically assume unless specifically overridden.

40. A client communicates sensitive data across the Internet. Which of the following controls would be most effective to prevent the use of the information if it were intercepted by an unauthorized party?

A. A firewall.

B. An access log.

C. Passwords.

D. Encryption.

Answer (D) is correct.

Encryption technology converts data into a code. Encoding data before transmission over communications lines makes it more difficult for someone with access to the transmission to understand or modify its contents.

- A.A firewall tries to prevent access from specific types of traffic to an internal network. After someone has obtained information from the site, a firewall cannot prevent its use.
- B.An access log only records attempted usage of a system.
- C.Passwords prevent unauthorized users from accessing the system. If information has already been obtained, a password cannot prevent its use.

41.To ensure privacy in a public-key encryption system, knowledge of which of the following keys would be required to decode the received message?

- 1.Private**
- 2.Public**

- A.1.
- B.2.
- C.Both 1 and 2.
- D.Neither 1 nor 2.

Answer (A) is correct.

In a public-key system, the public key is used to encrypt the message prior to transmission, and the private key is needed to decrypt (decode) the message.

- B.The private key, not the public key, is needed to decrypt (decode) the message.
- C.The recipient does not need the public key to decrypt the message.
- D.The private key is needed to decrypt (decode) the message.

42.Which of the following is a true statement regarding security over an entity's IT?

- A.Controls should exist to ensure that users have access to and can update only the data elements that they have been authorized to access.
- B.Controls over data sharing by diverse users within an entity should be the same for every user.
- C.The employee who manages the computer hardware should also develop and debug the computer programs.
- D.Controls can provide assurance that all processed transactions are authorized but cannot verify that all authorized transactions are processed.

Answer (A) is correct.

Authorization is the practice of ensuring that, once in a particular system, a user can only access those programs and data elements necessary for his or her job duties.

- B.Certain data should not be accessed by all individuals, and those who do have access may have different levels of authority. Thus, the controls should vary among users regardless of whether the environment includes a database.
- C.These duties should be segregated.
- D.Controls can play multiple roles in a database or nondatabase environment by comparing authorized transactions with processed transactions and reporting anomalies.

43.When a user enters a certain entity's system, a series of questions is asked of the user, including a name and mother's birth date. These questions are primarily intended to provide

- A.Authorization for processing.
- B.Access control to computer hardware.
- C.Authentication of the user.
- D.Data integrity control.

Answer (C) is correct.

Requiring specified information allows the computer to identify the user. This access control is intended to limit access to data and programs and the nature of that access.

- A.Such questions are intended to identify the user entering the system.
- B.Access to the computer has already taken place. Questions do not prevent access to the hardware.
- D.Such questions have no effect on the integrity of data.

44. What is a major disadvantage to using a private key to encrypt data?

- A. Both sender and receiver must have the private key before this encryption method will work.
- B. The private key cannot be broken into fragments and distributed to the receiver.
- C. The private key is used by the sender for encryption but not by the receiver for decryption.
- D. The private key is used by the receiver for decryption but not by the sender for encryption.

Answer (A) is correct.

Private-key, or symmetric, encryption is the less secure of the two encryption methods because only one key is used. This single key must be revealed to both the sender and recipient.

- B. The private key can be transmitted in fragments.
- C. The private key is also used by the receiver.
- D. The private key is also used by the sender.

45. A digital signature is used primarily to determine that a message is

- A. Unaltered in transmission.
- B. Not intercepted en route.
- C. Received by the intended recipient.
- D. Sent to the correct address.

Answer (A) is correct.

A digital signature is a means of authenticating an electronic document, such as a purchase order, acceptance of a contract, or financial information. Because digital signatures use public-key encryption, they are a highly secure means of ensuring security over the Internet.

- B. Encryption of text does not prevent its interception.
- C. Encryption of text does not ensure its receipt by the intended recipient.
- D. Encryption of text does not ensure that it will be sent to the correct address.

46. Which of the following IT developments poses the least risk to organizational security?

- A. Adoption of wireless technology.
- B. Use of public-key encryption.
- C. Outsourcing of the IT infrastructure.
- D. Enterprise-wide integration of functions.

Answer (B) is correct.

Encryption is essential when electronic commerce is conducted over public networks, such as the Internet. Thus, the use of public-key encryption is a response to risk, not a source of risk.

- A. Adoption of wireless technology increases the risk that communications will be intercepted.
- C. Outsourcing of the IT infrastructure means that ineffective controls over the outside service provider's operations could compromise the security of the organization's information.
- D. Enterprise-wide integration of functions, for example, in an ERP system with an organization-wide database, increases the difficulty of assuring the integrity of information. In an organization with discrete, closed functional subsystems, compromising one subsystem does not affect the others. In an ERP system, however, a breach of security may affect the entire organization.

47. Which of the following does not present any risk for an entity under public-key encryption?

- A. The transmission of the private keys between the parties.
- B. The complexity of the private key.
- C. The complexity of the public key.
- D. The security of the information after encryption.

Answer (A) is correct.

Public-key (asymmetric encryption) requires (1) a public key and (2) a private key issued by a trusted certificate authority. A sender encrypts a message using the recipient's public key. The recipient then decrypts the message using the recipient's private key. The private keys are never shared between the parties. Thus, there is no risk associated with transmitting private keys under public-key encryption.

B.While the complexity of private and public keys is normally not an issue given current computing standards, future increases in computing power could enable outsiders to steal the keys using brute force. Thus, risks associated with private-key complexity are never completely eliminated.

C.While the complexity of private and public keys is normally not an issue given current computing standards, future increases in computing power could enable outsiders to steal the keys using brute force. The complexity of the public key is important in this case because the public and private keys of the entity are mathematically related. Thus, risks associated with public-key complexity are never completely eliminated.

D.While the complexity of encrypted information is usually not an issue given current computing standards, future increases in computing power could enable outsiders to decrypt the information using brute force. Thus, risks associated with encrypted information are never completely eliminated.

48.The use of two-level authentication

A.Requires a username and password only.

B.Protects against a Trojan horse attack.

C.Requires information known only to the user.

D.Protects against a logic bomb.

Answer (C) is correct.

Two-level authentication (also referred to as two-factor authentication) requires (1) a username and password and (2) information known only to the user (e.g., information such as "make and model of the user's first car" or "favorite food") or something (s)he immediately has on hand (i.e., a physical hardware token).

A.Two-level authentication requires other information in addition to a username and password.

B.A Trojan horse is an apparently innocent program (e.g., a spreadsheet) that includes a hidden function that may do damage when activated. For example, it may contain a virus, which is a program code that copies itself from file to file. The virus may destroy data or programs. Viruses commonly spread through email attachments and downloads. Anti-virus software is generally used to protect against Trojan horses.

D.A logic bomb is much like a Trojan horse except it activates only upon some occurrence, e.g., on a certain date. Anti-virus software is generally used to protect against Trojan horses.

49.Which of the following is a computer program that appears to be legitimate but performs some illicit activity when it is run?

A.Hoax virus.

B.Web crawler.

C.Trojan horse.

D.Killer application.

Answer (C) is correct.

A Trojan horse is a computer program that appears friendly, for example, a game, but that actually contains an application destructive to the computer system.

A.A hoax virus is a false notice about the existence of a computer virus. It is usually disseminated through use of distribution lists and is sent by email or via an internal network.

B.A web crawler (a spider or bot) is a computer program created to access and read information on websites. The results are included as entries in the index of a search engine.

D.A killer application is one that is so useful that it may justify widespread adoption of a new technology.

50.The best preventive measure against a computer virus is to

- A. Compare software in use with authorized versions of the software.
- B. Execute virus exterminator programs periodically on the system.
- C. Allow only authorized software from known sources to be used on the system.
- D. Prepare and test a plan for recovering from the incidence of a virus.

Answer (C) is correct.

Preventive controls are designed to prevent errors before they occur. Detective and corrective controls attempt to identify and correct errors. Preventive controls are usually more cost beneficial than detective or corrective controls. Allowing only authorized software from known sources to be used on the system is a preventive measure. The authorized software from known sources is expected to be free of viruses.

- A. Comparing software with authorized versions is a detective control used to determine whether only authorized versions of the software are being used on the system.
- B. Executing virus exterminator programs is a corrective control against a computer virus.
- D. Preparing and testing a plan for virus recovery is a corrective control against a computer virus.

51. Which of the following is an indication that a computer virus is present?

- A. Frequent power surges that harm computer equipment.
- B. Unexplainable losses of or changes to data.
- C. Inadequate backup, recovery, and contingency plans.
- D. Numerous copyright violations due to unauthorized use of purchased software.

Answer (B) is correct.

The effects of computer viruses range from harmless messages to complete destruction of all data within the system. A symptom of a virus would be the unexplained loss of or change to data.

- A. Power surges are caused by hardware or power supply problems.
- C. Inadequate backup, recovery, and contingency plans are operating policy weaknesses.
- D. Copyright violations represent policy or compliance problems.

52. Managers at a consumer products company purchased personal computer software from only recognized vendors and prohibited employees from installing nonauthorized software on their personal computers. To minimize the likelihood of computer viruses infecting any of its systems, the company should also

- A. Restore infected systems with authorized versions.
- B. Recompile infected programs from source code backups.
- C. Institute program change control procedures.
- D. Test all new software on a stand-alone personal computer.

Answer (D) is correct.

Software from recognized sources should be tested in quarantine (for example, in a test/development machine or a stand-alone personal computer) because even vendor-supplied software may be infected with viruses. The software should be run with a vaccine program and tested for the existence of logic bombs, etc.

- A. If viruses infect a system, the company should restore the system with authorized software, but this procedure does not minimize the likelihood of initial infection.
- B. If viruses infect programs that the company created, it should recompile the programs from source code backups, but this procedure does not minimize the likelihood of initial infection.
- C. Instituting program change control procedures is good practice but does not minimize the likelihood of the system being infected initially.

53. Which of the following operating procedures increases an organization's exposure to computer viruses?

- A. Encryption of data files.
- B. Frequent backup of files.
- C. Downloading public-domain software from websites.

D. Installing original copies of purchased software on hard disk drives.

Answer (C) is correct.

Viruses are spread through shared data. Downloading public-domain software carries a risk that contaminated data may enter the computer.

- A. Viruses are spread through the distribution of contaminated programs.
- B. Backing up files does not increase the chances of a virus entering the computer system.
- D. Original copies of purchased software on hard disk drives should be free of viruses.

54. An organization installed antivirus software on all its personal computers. The software was designed to prevent initial infections, stop replication attempts, detect infections after their occurrence, mark affected system components, and remove viruses from infected components. The major risk in relying on antivirus software is that antivirus software may

- A. Not detect certain viruses.
- B. Make software installation overly complex.
- C. Interfere with system operations.
- D. Consume too many system resources.

Answer (A) is correct.

Antivirus software designed to identify and remove known viruses is sometimes known as a vaccine. A vaccine works only for known viruses and may not be effective for variants of those viruses or new viruses.

- B. Having antivirus software is unlikely to make software installation overly complex.
- C. Antivirus software need not interfere with system operations. Its execution can be scheduled in advance so as not to interfere with running programs.
- D. Antivirus software can be set to execute at times when it would not consume too many system resources, e.g., at startup.

55. What is the best course of action to take if a program takes longer than usual to load or execute?

- A. Test the system by running a different application program.
- B. Reboot the system.
- C. Run antivirus software.
- D. Back up the hard disk files to floppies.

Answer (C) is correct.

The described condition is a symptom of a virus. Many viruses will spread and cause additional damage. Use of an appropriate antivirus program may identify and even eliminate a viral infection. Ways to minimize computer virus risk in a networked system include restricted access, regularly updated passwords, periodic testing of systems with virus detection software, and the use of antivirus software on all shareware prior to introducing it into the network.

- A. Running a different program as a test may cause the virus to spread and do additional damage.
- B. Rebooting the system may cause the virus to spread and do additional damage.
- D. Backing up hard disk files may cause the virus to spread and do additional damage.

56. Because of competitive pressures to be more responsive to their customers, some organizations have connected their internal personal computer networks through a host computer to outside networks. A risk of this practice is that

- A. Viruses may gain entry to one or more company systems.
- B. Uploaded files may not be properly edited and validated.
- C. Data downloaded to the personal computers may not be sufficiently timely.
- D. Software maintenance on the personal computers may become more costly.

Answer (A) is correct.

Viruses are harmful programs that disrupt memory and processing functions and may destroy data. They spread from network to network, from infected diskettes, or from infected machines. Hence, connecting all networked personal computers through a host computer to outside networks increases the exposure of all of a company's computers to viruses.

B. Whether uploaded files are properly edited and validated is independent of whether external links to other networks exist.

C. Whether data downloaded to the personal computers is sufficiently timely is independent of whether external links to other networks exist.

D. Whether software maintenance on the personal computers becomes more costly is independent of whether external links to other networks exist.

57. Spoofing is one type of online activity used to launch malicious attacks. Spoofing is

A. Trying large numbers of letter and number combinations to access a network.

B. Eavesdropping on information sent by a user to the host computer of a website.

C. Accessing packets flowing through a network.

D. Identity misrepresentation in cyberspace.

Answer (D) is correct.

Passwords, user account numbers, and other information may be stolen using techniques such as Trojan horses, IP spoofing, and packet sniffers. Spoofing is identity misrepresentation in cyberspace, for example, by using a false website to obtain information about visitors.

A. A brute-force attack uses password cracking software to try large numbers of letter and number combinations to access a network.

B. Sniffing is use of software to eavesdrop on information sent by a user to the host computer of a website.

C. A man-in-the-middle attack takes advantage of network packet sniffing and routing and transport protocols to access packets flowing through a network.

58. Which of the following is a malicious program, the purpose of which is to reproduce itself throughout the network and produce a denial of service attack by excessively utilizing system resources?

A. Logic bomb.

B. Virus.

C. Worm.

D. Trojan horse.

Answer (C) is correct.

A worm is an independent program that reproduces by copying itself from one system to another over a network and consumes computer and network resources.

A. A logic bomb is a mechanism for releasing a system attack of some kind, which is triggered when a particular condition (for example, a certain date or system operation) occurs.

B. A virus is a code fragment (not an independent program) that reproduces by attaching to another program.

D. A Trojan horse is an independent program that appears to perform a useful function but hides another unauthorized program inside it.

59. The reliability and integrity of all critical information of an organization, regardless of the media in which the information is stored, is the responsibility of

A. Shareholders.

B. IT department.

C. Management.

D. All employees.

Answer (C) is correct.

Internal auditors determine whether senior management and the board have a clear understanding that information reliability and integrity is a management responsibility. Information reliability and integrity includes accuracy, completeness, and security.

A. Management has a responsibility to shareholders and other stakeholders (customers, vendors, etc.) to ensure information is secure and reliable.

B. The IT department is generally the functional department charged by management to monitor and ensure all information is controlled in accordance with company policies and rules.

D. Management has a responsibility to employees to ensure employee information (employee social security numbers, direct deposit account information, etc.) is secure and accurate.

60. Who determines whether the internal audit activity has access to resources sufficient to evaluate the reliability and integrity of information?

A. The chief executive officer.

B. The chief audit executive.

C. The external auditor.

D. The chief operating officer.

Answer (B) is correct.

The chief audit executive determines whether the internal audit activity possesses, or has access to, competent audit resources to evaluate information reliability and integrity and associated risk exposures. This includes both internal and external risk exposures and exposures relating to the organization's relationships with outside entities.

A. The CAE must make a determination of whether the internal audit activity has the resources to meet its obligations.

C. The CAE must make a determination of whether the internal audit activity has the resources to meet its obligations.

D. The CAE must make a determination of whether the internal audit activity has the resources to meet its obligations.

61. Which of the following is part of the board's role in protecting against privacy threats?

A. Establishing a privacy framework.

B. Identifying the information gathered by the organization that is deemed personal or private.

C. Identifying the methods used to collect information.

D. Determining whether the use of the information collected is in accordance with its intended use and the laws.

Answer (A) is correct.

The board is ultimately accountable for ensuring that the principal risks of the organization have been identified, and the appropriate control processes have been implemented to mitigate those risks. This includes establishing the necessary privacy framework for the organization and monitoring its implementation.

B. Identification of the information gathered by the organization that is deemed personal or private is a duty of the internal auditors.

C. Identification of the collection methods used is a duty of the internal auditors.

D. Determining whether the use of the information collected is in accordance with its intended use and the laws is a duty of the internal auditors.

62. Freedom from monitoring best defines

A. Personal privacy.

- B. Privacy of space.
- C. Privacy of communication.
- D. Privacy of information.

Answer (C) is correct.

Privacy may encompass (1) personal privacy (physical and psychological), (2) privacy of space (freedom from surveillance), (3) privacy of communication (freedom from monitoring), and (4) privacy of information (collection, use, and disclosure of personal information by others).

- A. Personal privacy is physical and psychological.
- B. Privacy of space is freedom from surveillance.
- D. Privacy of information is freedom from collection, use, and disclosure of personal information by others.

63. When evaluating management of the organization's privacy framework, the internal auditor considers

- A. The applicable laws relating to privacy.
- B. Conferring with in-house legal counsel.
- C. Conferring with information technology specialists.
- D. All of the answers are correct.

Answer (D) is correct.

In an evaluation of the privacy framework, the internal auditor considers the following:

- The various laws, regulations, and policies relating to privacy in the jurisdictions where the organization operates.
- Conferring with in-house legal counsel to determine the exact nature of laws, regulations, and other standards and practices applicable to the organization and the countries where it operates.
- Conferring with information technology specialists to determine that information security and data protection controls are in place and regularly reviewed and assessed for appropriateness.
- The level or maturity of privacy practices.

- A. The internal auditor also considers conferring with in-house counsel and information technology specialists.
- B. The internal auditor also considers the applicable laws, regulations, and policies relating to privacy and conferring with information technology specialists.
- C. The internal auditor also considers the applicable laws, regulations, and policies relating to privacy and conferring with in-house legal counsel.

64. Which of the following statements is false with respect to information security?

- A. Internal auditors should determine that senior management and the board, audit committee, or other governing body have a clear understanding that information reliability and integrity is the responsibility of the internal audit activity.
- B. The chief audit executive should determine that the internal audit activity possesses, or has access to, competent auditing resources to evaluate information security and associated risk exposures.
- C. Internal auditors should periodically assess the organization's information security practices and recommend, as appropriate, enhancements to, or implementation of, new controls and safeguards.
- D. Internal auditors should assess the effectiveness of preventive, detective, and mitigative measures against past attacks, as deemed appropriate, and future attempts or incidents deemed likely to occur.

Answer (A) is correct.

Internal auditors determine whether senior management and the board have a clear understanding that information reliability and integrity is a management responsibility. This responsibility includes all critical information of the organization, regardless of how the information is stored.

- B. These statements about information security are correct.
- C. These statements about information security are correct.
- D. These statements about information security are correct.

65. Which of the following is the best policy for the protection of a company's vital information resources from computer viruses?

- A. Stringent corporate hiring policies for staff working with computerized functions.
- B. Existence of a software program for virus prevention.
- C. Prudent management procedures instituted in conjunction with technological safeguards.
- D. Physical protection devices in use for hardware, software, and library facilities.

Answer (C) is correct.

Acceptably safe computing can be achieved by carefully crafted policies and procedures used in conjunction with antivirus and access control software.

- A. Hiring policies can provide assurance of qualified personnel for operation of the system, but they cannot prevent introduction of viruses from bulletin boards or from outside sources.
- B. Software programs can identify and neutralize known viruses but may not recognize and properly neutralize new strains of a computer virus.
- D. Physical protection devices can reduce access but cannot prevent introduction of viruses by errant employees or from outside sources.

66. Which of the following statements is(are) correct regarding electronic mail security?

1. **Electronic mail can be no more secure than the computer system on which it operates.**
2. **Confidential electronic mail messages should be stored on the mail server as electronic mail for the same length of time as similar paper-based documents.**
3. **In larger organizations, there may be several electronic mail administrators and locations with varying levels of security.**

- A. 1 only.
- B. 1 and 2 only.
- C. 1 and 3 only.
- D. 2 and 3 only.

Answer (C) is correct.

Electronic mail can be no more secure than the computer system on which it operates. Also, in larger organizations, there may be several electronic mail administrators and locations with varying levels of security.

- A. In larger organizations, there may be several electronic mail administrators and locations with varying levels of security.
- B. Confidential electronic mail messages may be subject to a different retention period from that of similar paper-based documents. Also, in larger organizations, there may be several electronic mail administrators and locations with varying levels of security.
- D. Electronic mail can be no more secure than the computer system on which it operates. Also, confidential electronic mail messages may be subject to a different retention period from that of similar paper-based documents.

67. A shift from manual to information technology (IT) for business operations causes auditors to seek assurance primarily regarding

- A. Processes.
- B. External IT interfaces.
- C. Third-party review.
- D. Historical data accuracy.

Answer (A) is correct.

Widespread use of IT for all business processes has changed audit emphasis from providing assurance on historical data at a moment in time or for a period of time to assurance about the reliability of processes. IT generates historical data almost automatically. If the process is wrong, data also are wrong and vice versa.

- B. External IT interfaces are only part of an entity's information processes.

- C. An external audit always has been a third party review.
- D. Historical data accuracy always has been the ultimate emphasis of an external audit. But pervasive IT use has changed the emphasis to the processes by which the historical data are generated.

68. Select the cyberattack which is best associated with extorting an individual or an organization.

- A. Ransomware.
- B. Phishing.
- C. Software piracy.
- D. Hacking.

Answer (A) is correct.

Ransomware is a type of malware that threatens to publish the victim's data or prevents users from accessing their system or personal files and demands ransom payment in order to regain access.

B. Phishing is a method of electronically obtaining confidential information through deceit. The perpetrator sets up a website that appears to be legitimate but actually serves no purpose other than to obtain the victim's information.

C. Software piracy is any duplication of software beyond what is allowed in the software license agreement. Software piracy is illegal, and use of unlicensed software increases the risk of introducing computer viruses into the organization. Such software is less likely to have been carefully tested.

D. Hacking refers to unauthorized intrusion into a computer or network and modifying or altering (i.e., tampering) the computer software or hardware to accomplish a goal outside the creator's original objective.

69. All of the following are correct statements regarding smart devices except

- A. The portability of smart devices is a major factor when assessing physical security risks.
- B. Smart machines are automation technology.
- C. Remote wipe is the process of deleting data and applications without physical access to the smart device.
- D. Although smart devices have the capability of adapting their behavior based on experience, smart devices are not able to learn and operate on their own.

Answer (D) is correct.

Generally, smart machine technology characteristics include but are not limited to (1) learning and operating on their own, (2) adapting their behavior based on experience (learning), and (3) generating unanticipated results.

A. Physical security risks are associated with smart devices as a result of their portability. Information might become vulnerable to misuse in the event of theft or loss of the smart device or if the device is not cleaned of all data associated with the organization when the user leaves the organization.

B. Smart machines are automation technology that enable processes or procedures to be performed without human assistance. Generally, smart machine technology characteristics include but are not limited to (1) learning and operating on their own, (2) adapting their behavior based on experience (learning), and (3) generating unanticipated results.

C. Controls that generally lessen or eliminate the risks associated with the use of smart technology accessing an organization's information systems include but are not limited to remote wipe, authentication, encryption, and anti-malware software.

70. Contingency plans for information systems should include appropriate backup agreements. Which of the following arrangements would be considered too vendor-dependent when vital operations require almost immediate availability of computer resources?

- A. A "hot site" arrangement.
- B. A "cold site" arrangement.
- C. A "cold and hot site" combination arrangement.
- D. Using excess capacity at another data center within the organization.

Answer (B) is correct.

Organizations should maintain contingency plans for operations in the case of a disaster. These plans usually include off-site storage of important backup data and an arrangement for the continuation of operations at another location. A cold site has all needed assets in place except the needed computer equipment and is vendor-dependent for timely delivery of equipment.

A. A hot site has all needed assets in place and is not vendor-dependent.

C. A cold and hot site combination allows the hot site to be used until the cold site is prepared and is thus not too vendor-dependent.

D. Excess capacity would ensure that needed assets are available and would not be vendor-dependent.

71. In conducting an audit of an organization's disaster recovery capability, which of the following would an auditor consider to be the most serious weakness?

A. Tests use recovery scripts.

B. Hot-site contracts are 2 years old.

C. Backup media are stored on-site.

D. Only a few systems are tested annually.

Answer (C) is correct.

A crucial element of business recovery is the existence of a comprehensive and current disaster recovery plan. A comprehensive plan provides for (1) emergency response procedures, (2) alternative communication systems and site facilities, (3) information systems backup, (4) disaster recovery, (5) business impact assessments and resumption plans, (6) procedures for restoring utility services, and (7) maintenance procedures for ensuring the readiness of the organization in the event of an emergency or disaster. Storing backup media on-site is a weakness in the plan. They should not be located where they can be affected by the same event that interrupted the system's activities.

A. Use of scripts is a common practice to sequence the activities required for resumption of business.

B. Contracts for off-site facilities are not updated frequently.

D. Generally, the limited test-time window will only permit testing a few systems.

72. Each day, after all processing is finished, a bank performs a backup of its online deposit files and retains it for 7 days. Copies of each day's transaction files are not retained. This approach is

A. Valid, in that having a week's worth of backups permits recovery even if one backup is unreadable.

B. Risky, in that restoring from the most recent backup file would omit subsequent transactions.

C. Valid, in that it minimizes the complexity of backup/recovery procedures if the online file has to be restored.

D. Risky, in that no checkpoint/restart information is kept with the backup files.

Answer (B) is correct.

At appropriate intervals, the disk files should be copied on magnetic tape so that restart procedures can begin at those points if data are lost or destroyed. However, not retaining each day's transaction files is risky because information processed since the last backup file was created will be lost.

A. The practice of not retaining daily transaction data is unsound in that the bank loses a day's transactions for each backup that is unreadable.

C. The practice of not retaining daily transaction data certainly minimizes complexity but at the expense of losing transaction data if the online file must be restored from the backup.

D. Checkpoint/restart information is not needed. The backups are created after all processing is finished for the day.

73. A company updates its accounts receivable master file weekly and retains the master files and corresponding update transactions for the most recent 2-week period. The purpose of this practice is to

A. Verify run-to-run control totals for receivables.

B. Match internal labels to avoid writing on the wrong volume.

C. Permit reconstruction of the master file if needed.

D. Validate groups of update transactions for each version.

Answer (C) is correct.

Periodic backup and retention of both master files and transaction files is an integral part of any business continuity plan. If the data center is unavailable, these can be used to restore the master file and resume processing.

- A. Comparison of batch totals is a control over the completeness of processing, not a recovery procedure.
- B. Internal labels may avoid destruction of data but do not aid in recovery.
- D. Validation may avoid destruction of data but does not aid in recovery.

74. Good planning will help an organization restore computer operations after a processing outage. Good recovery planning should ensure that

- A. Backup/restart procedures have been built into job streams and programs.
- B. Change control procedures cannot be bypassed by operating personnel.
- C. Planned changes in equipment capacities are compatible with projected workloads.
- D. Service level agreements with owners of applications are documented.

Answer (A) is correct.

The disaster plan should embrace data center recovery, critical application recovery, and network recovery. It should be updated and current with regard to recent test results and new applications, equipment, and network configurations. The plan should also ensure that backup facilities are still able to process critical applications and that end-user responsibility is established. Another essential component of a disaster recovery plan is that backup/restart procedures have been anticipated and provided for in the application systems.

- B. Whether change control procedures can be bypassed is not usually a consideration in disaster recovery planning.
- C. Planned rather than actual changes in equipment capacities are not relevant in disaster recovery planning.
- D. Ensuring that service level agreements with owners of critical applications are adequate is not a function of disaster recovery planning.

75. Which of the following procedures would an entity most likely include in its disaster recovery plan?

- A. Convert all data from EDI format to an internal company format.
- B. Maintain a Trojan horse program to prevent illicit activity.
- C. Develop an auxiliary power supply to provide uninterrupted electricity.
- D. Store duplicate copies of files in a location away from the computer center.

Answer (D) is correct.

Off-site storage of duplicate copies of critical files protects them from a fire or other disaster at the computing facility. The procedure is part of an overall disaster recovery plan.

- A. Converting all data from EDI format to an internal company format would reduce the ability to process transactions with outside companies.
- B. A Trojan horse program is a computer program that appears to be legitimate but performs some illicit activity when it is run.
- C. The use of an uninterruptible power supply ensures continued processing rather than recovery from a disaster.

76. Fact Pattern: An automobile and personal property insurer has decentralized its information processing to the extent that headquarters has less processing capacity than any of its regional processing centers. These centers are responsible for initiating policies, communicating with policyholders, and adjusting claims. The company uses leased lines from a national telecommunications company. Initially, the company thought there would be little need for interregion communication, but that has not been the case. The company underestimated the number of customers that would move between regions and the number of customers with claims

arising from accidents outside their regions. The company has a regional center in an earthquake-prone area and is planning how to continue processing if that center, or any other single center, were unable to perform its processing.

Q.The company has considered several alternatives for replacing the hardware required for a regional center's processing. An advantage of using a third-party cold site is that

- A.Personnel employed at the site would be familiar with company operations.
- B.Travel expenses would be minimized for company personnel.
- C.No additional equipment would be required at the regional centers.
- D.The replacement site could be up and running in a few hours.

Answer (C) is correct.

A cold site backup facility is a shell facility where the user can quickly install computer equipment and resume operations in the event of a disaster. The facility has all of the needed assets in place except the needed computer equipment and is vendor-dependent for timely delivery of equipment. Accordingly, an advantage of using a third-party cold site is the elimination of the need for additional equipment.

- A.Personnel employed at the site are not related to the company and would therefore not be familiar with company operations.
- B.Depending on the location of the cold site, traveling expenses could increase dramatically.
- D.It is not an advantage of using a third-party cold site; a few hours of downtime could be very costly to the organization.

77.Fact Pattern: An automobile and personal property insurer has decentralized its information processing to the extent that headquarters has less processing capacity than any of its regional processing centers. These centers are responsible for initiating policies, communicating with policyholders, and adjusting claims. The company uses leased lines from a national telecommunications company. Initially, the company thought there would be little need for interregion communication, but that has not been the case. The company underestimated the number of customers that would move between regions and the number of customers with claims arising from accidents outside their regions. The company has a regional center in an earthquake-prone area and is planning how to continue processing if that center, or any other single center, were unable to perform its processing.

Q.Unfortunately, the company has not revised its contingency plan since the time when its data processing was mostly centralized at headquarters. The existing plan is likely to be out of date because of

- A.Changes in equipment, data, and software.
- B.Inadequate processing capability at headquarters.
- C.Lack of arrangements for a backup site for headquarters.
- D.Personnel turnover at regional centers.

Answer (A) is correct.

When a company decentralizes its information processing, many changes in equipment, data, and software occur as a result of the different processing methods. Because the company has not revised its contingency plan since the time processing was centralized, the plan is most likely out of date as a result of the changes in equipment, data, and software.

- B.Inadequate processing capability at headquarters is not a reason that would cause a contingency plan to be out of date.
- C.Lack of arrangements for a backup site for headquarters is not a reason that would cause a contingency plan to be out of date.
- D.Personnel turnover at regional centers is not a reason that would cause a contingency plan to be out of date.

78.A client is concerned that a power outage or disaster could impair the computer hardware's ability to function as designed. The client desires off-site backup hardware facilities that are fully configured and ready to operate within several hours. The client most likely should consider a

- A.Cold site.
- B.Cool site.
- C.Warm site.
- D.Hot site.

Answer (D) is correct.

A hot site is a service bureau that is a fully operational processing facility and is promptly available in the case of a power outage or disaster.

- A.A cold site is a shell facility suitable for quick installation of computer equipment. Installing computer equipment would take more time in a cold site than in a hot site.
- B.“Cool site” is a fabricated term that does not describe actual facilities.
- C.A warm site provides an intermediate level of backup. Its use results in more downtime than a hot site.

79.If a corporation’s disaster recovery plan requires fast recovery with little or no downtime, which of the following backup sites should it choose?

- A.Hot site.
- B.Warm site.
- C.Cold site.
- D.Quick site.

Answer (A) is correct.

A company uses a hot site backup when fast recovery is critical. The hot site includes all software, hardware, and other equipment necessary for a company to carry out operations. Hot sites are expensive to maintain and may be shared with other organizations with similar needs.

- B.A warm site provides an intermediate level of backup. Its use results in more downtime than a hot site.
- C.A cold site is a shell facility suitable for quick installation of computer equipment. Disaster recovery would take more time in a cold site than a hot site.
- D.There is no backup site called a quick site.

80.Which of the following series identifies recovery solutions and sites for which a recovery plan exists?

- A.Red, yellow, green.
- B.High, medium, low.
- C.Fast, moderate, slow.
- D.Hot, warm, cold.

Answer (D) is correct.

The following are recovery solutions and sites for which a recovery plan exists:

Hot -- Resources are available at the site(s), and data are synchronized in real time to permit recovery immediately or within hours.

Warm -- Resources are available at the site(s) but may need to be configured to support the production system. Some data may need to be restored. Typical recovery time is 2 days to 2 weeks.

Cold -- Sites have been identified with space and base infrastructure. Resources are not available at the sites. Data will likely need to be restored. Typical recovery time is 2 weeks to a month.

- A.The correct series is hot, warm, cold.
- B.The correct series is hot, warm, cold.
- C.The correct series is hot, warm, cold.

81.Business continuity management (BCM) provides for all of the following except?

- A.Segregation of duties.
- B.Alternative work spaces.
- C.Business impact analysis.

D.Alternative sourcing.

Answer (A) is correct.

As part of an entity's business recovery and continuity strategy, it plans for alternative staffing, sourcing, and work spaces as well as for the return to normal operations. Segregation of duties, however, is a category of controls.

- B.BCM provides for alternative work spaces.
- C.BCM provides for business impact analysis.
- D.BCM provides for alternative sourcing.

82.Which element of business continuity management (BCM) requires definition of the recovery point objective?

- A.Risk assessment and mitigation.
- B.Education, awareness, and maintenance.
- C.Management support.
- D.Business impact analysis.

Answer (D) is correct.

Business impact analysis identifies processes integral to functioning in a disaster and determines how soon they should be recovered. Thus, the entity (1) identifies critical processes, (2) defines the recovery time objective and the recovery point objective for processes and resources, and (3) identifies the other parties and physical resources needed for recovery. The recovery time objective is the duration of time and service level within which a process must be restored. The recovery point objective is the amount of data the entity can afford to lose.

- A.During the risk assessment and mitigation process, the entity (1) defines disruptive (credible) events, (2) assesses their effects, and (3) develops mitigation strategies.
- B.Education and awareness are vital to BCM and execution of the business continuity plan. The BCM capabilities and documentation must be maintained to ensure that they remain effective and aligned with business priorities.
- C.Management support is support for properly preparing, maintaining, and practicing a business continuity plan by assigning adequate resources, people, and funds.

83.Which component of an emergency management program of a business normally has the longest time frame?

- A.Emergency response.
- B.Crisis management.
- C.Continuity management.
- D.Communications management.

Answer (C) is correct.

The objective of business continuity management is to restore critical processes and to minimize the financial effects of a disaster or business disruption. Its time frame is measured in hours and days if not weeks.

- A.The time frame of emergency response is measured in hours if not minutes.
- B.The time frame of crisis management is typically measured in days if not hours.
- D.Communicating with stakeholders (including the public) about a crisis and the steps for restoring business processes is the focus of crisis management.

84.With respect to business interruptions, what is the most crucial element of business recovery?

- A.Information systems backup.
- B.Alternative communication systems and site facilities.

- C. Business impact assessments and resumption plans.
- D. Disaster recovery plan.

Answer (D) is correct.

A crucial element of business recovery is the existence of a comprehensive and current disaster recovery plan. A comprehensive plan provides for (1) emergency response procedures, (2) alternative communication systems and site facilities, (3) information systems backup, (4) disaster recovery, (5) business impact assessments and resumption plans, (6) procedures for restoring utility services, and (7) maintenance procedures for ensuring the readiness of the organization in the event of an emergency or disaster.

- A. Information systems backup should be included in the disaster recovery plan, which is the most crucial element of business recovery.
- B. Alternative communication systems and site facilities should be included in the disaster recovery plan, which is the most crucial element of business recovery.
- C. Business impact assessments and resumption plans should be included in the disaster recovery plan, which is the most crucial element of business recovery.

85. The audit objective when auditing an organization's business continuity and disaster recovery plan is to

- 1) **Verify that the plan is adequate to ensure the timely resumption of operations and processes after adverse circumstances.**
- 2) **Verify it is structured to incorporate important changes that could take place over time.**
- 3) **Verify that it reflects the current business operating environment.**

- A. 1 and 2.
- B. 1 and 3.
- C. 2 and 3.
- D. 1, 2, and 3.

Answer (D) is correct.

Internal auditors should periodically audit the organization's business continuity and disaster recovery plan. The audit objective is to verify that the plan is adequate to ensure the timely resumption of operations and processes after adverse circumstances, and that it reflects the current business operating environment. Furthermore, the internal audit activity should examine the recovery plan to determine whether (1) it is structured to incorporate important changes that could take place over time and (2) the revised plan will be communicated to the appropriate people inside and outside the organization.

- A. The audit objective when auditing an organization's disaster recovery and business continuity plan also includes verifying that the plan reflects the current business operating environment.
- B. The audit objective when auditing an organization's disaster recovery and business continuity plan also includes verifying that it is structured to incorporate important changes that could take place over time.
- C. The audit objective when auditing an organization's disaster recovery and business continuity plan also includes verifying that the plan is adequate to ensure the timely resumption of operations and processes after adverse circumstances.

86. Which element of business continuity management involves identification of threats and the determination of their impact?

- A. Business impact analysis.
- B. Risk assessment and mitigation.
- C. Business recovery and continuity strategy.
- D. Awareness and training.

Answer (B) is correct.

Risk assessment and mitigation identifies risks from such threats (disruptive events) as (1) natural disasters, (2) IT events (e.g., cyberterrorism, viruses, and denial-of-service attack), (3) supplier failures,

(4) industrial events (e.g., fires and toxic waste spills), (5) labor disruptions, and (6) human failures (e.g., fraud, other criminal acts, and errors). BCM then assesses their probability and impact and develops mitigation strategies.

A. Business impact analysis (1) identifies the processes that are essential to business continuity during a disaster and (2) determines (a) a recovery time objective for a business process (length of time and service level for restoration) and (b) a recovery point objective for IT (data that can be lost in a disaster without unacceptable consequences).

C. The business recovery and continuity strategy states in detail the procedures and resources needed for recovery.

D. Awareness and training element addresses the preparation of the staff so that they will know their duties in the business continuity plan.

87. Which of the following procedures should be included in the disaster recovery plan for an Information Technology department?

A. Replacement of personal computers for user departments.

B. Identification of critical applications.

C. Physical security of warehouse facilities.

D. Cross-training of operating personnel.

Answer (B) is correct.

The first step in preparing a business continuity/disaster recovery plan is to identify and prioritize the entity's critical applications.

A. Replacement of personal computers is a procedure for upgrading computers, not disaster recovery.

C. Physical security may prevent a disaster but is not a specific recovery procedure.

D. Cross-training of operating personnel is not a specific recovery procedure.

88. In which of the following locations should a copy of the accounting system data backup of year-end information be stored?

A. Secure off-site location.

B. Data backup server in the network room.

C. Fireproof cabinet in the data network room.

D. Locked file cabinet in the accounting department.

Answer (A) is correct.

The IT function should have a business continuity/disaster recovery plan that will allow it to resume normal processing in the event of a disaster. The plan should include the creation of backup (duplicate) copies of data files, databases, programs, and documentation. It should also mandate storage of backup copies off-site and plan for auxiliary processing at another site.

B. The backup of year-end accounting system information should be stored off-site in a remote location.

C. The backup of year-end accounting system information should be stored off-site in a remote location.

D. The backup of year-end accounting system information should be stored off-site in a remote location.

89. Which of the following best describes the primary reason that organizations develop contingency plans for their computer-based information systems operations?

A. To ensure that they will be able to process vital transactions in the event of a disaster.

B. To ensure the safety of important records.

C. To help hold down the cost of insurance.

D. To plan for sources of capital for recovery from any type of disaster.

Answer (A) is correct.

Contingency plans must be drafted so that the organization will be able to resume normal processing following a disaster.

- B.The safety of records is a secondary reason.
- C.The reduction of insurance costs is a secondary reason.
- D.Planning for sources of capital is seldom included in disaster recovery planning.

90.Which of the following best describes a hot site?

- A.Location within the company that is most vulnerable to a disaster.
- B.Location where a company can install data processing equipment on short notice.
- C.Location that is equipped with a redundant hardware and software configuration.
- D.Location that is considered too close to a potential disaster area.

Answer (C) is correct.

A hot site is a fully operational processing facility that is immediately available.

- A.The hot site must be located where the company is least vulnerable to disaster.
- B.A location where a company can install data processing equipment on short notice is the definition of a cold site.
- D.A location deemed too close to a potential disaster area cannot be designated a hot site

91.Which of the following configurations of elements represents the most complete disaster recovery plan?

- A.Vendor contract for alternate processing site, backup procedures, names of persons on the disaster recovery team.
- B.Alternate processing site, backup and off-site storage procedures, identification of critical applications, test of the plan.
- C.Off-site storage procedures, identification of critical applications, test of the plan.
- D.Vendor contract for alternate processing site, names of persons on the disaster recovery team, off-site storage procedures.

Answer (B) is correct.

Disaster recovery is the process of resuming normal information processing operations after the occurrence of a major interruption. Having an alternate processing site up and running, actively backing up data and storing it off-site, identifying critical applications, and testing the recovery plan is the most complete option given.

- A.Having an alternate processing site is one step further than having a contract for a site, off-site storage of data is more secure than simply backing up data, identification of the critical applications is more secure than having a list of team members, and testing the contingency plan is necessary to be sure it works when it will be needed most.
- C.An alternate processing site and backup procedures are necessary.
- D.Having an alternate processing site is one step further than having a contract for a site, identification of the critical applications is more secure than having a list of team members, and off-site storage procedures do not include data backup.

92.A controller is developing a disaster recovery plan for a corporation's computer systems. In the event of a disaster that makes the company's facilities unusable, the controller has arranged for the use of an alternate location and the delivery of duplicate computer hardware to this alternate location. Which of the following recovery plans would best describe this arrangement?

- A.Hot site.
- B.Cold site.
- C.Back-up site procedures.
- D.Hot spare site agreement.

Answer (B) is correct.

An alternate processing facility, or recovery center, is a physical location maintained by an outside contractor for the express purpose of providing processing facilities for customers in case of disaster. Recovery centers can take many forms. Organizations determine which facility is best by calculating

the tradeoff between the cost of the contract and the cost of downtime. A cold site is a shell facility lacking most infrastructure but readily available for the quick installation of hardware and software.

A.A hot site is a fully operational processing facility that is immediately available. Duplicate computer hardware would be unnecessary when utilizing a hot site.

C.The described arrangement concerns the description of the alternate processing center, not the procedures used at the back-up site.

D.A hot spare site agreement is not described by the recovery plan arrangement being developed by the controller.

93.The performance audit report of an information technology department indicated that the department lacked a disaster recovery plan. Which of the following steps should management take first to correct this condition?

A.Bulletproof the information security architecture.

B.Designate a hot site.

C.Designate a cold site.

D.Prepare a statement of responsibilities for tasks included in a disaster recovery plan.

Answer (D) is correct.

Contingency planning is the name commonly given to the activity of maintaining data availability. Preparing a statement of responsibilities for tasks included in a disaster recovery plan is one of the steps in creating a disaster recovery plan for the information technology department.

A.Reinforcing information security is not the first step management would take to correct the condition of lack of a disaster recovery plan for the information technology department.

B.Designating a hot site would be a step taken later in the preparation of a disaster recovery plan

C.Designating a cold site would be a step taken later in the disaster recovery plan preparation process.

94.Bacchus, Inc., is a large multinational corporation with various business units around the world. After a fire destroyed the corporate headquarters and largest manufacturing site, plans for which of the following would help Bacchus ensure a timely recovery?

A.Daily backup.

B.Network security.

C.Business continuity.

D.Backup power.

Answer (C) is correct.

Business continuity is the continuation of business by other means during the period in which computer processing is unavailable or less than normal. A disaster such as a fire necessitates the existence of an alternate processing facility. This facility is a physical location maintained by an outside contractor for the express purpose of providing processing facilities for customers in case of disaster.

A.Daily backup plans would not ensure a timely recovery from a disaster.

B.Plans for network security would not be relevant concerning timely recovery from a disaster.

D.Plans for backup power would not help Bacchus ensure a timely recovery from a fire that destroyed its corporate headquarters and largest manufacturing site.

95.Which of the following terms refers to a site that has been identified and maintained by the organization as a data processing disaster recovery site but has not been stocked with equipment?

A.Hot.

B.Cold.

C.Warm.

D.Flying start.

Answer (B) is correct.

A cold site is a shell facility lacking most infrastructure but readily available for the quick installation of hardware and software.

A hot site is a fully operational processing facility that is immediately available.

A warm site is a facility with limited hardware already installed but lacking all the necessary equipment and software.

A flying-start site is a hot site with the latest data and software that permits startup within a few minutes or even a few seconds.

96. An information technology director collected the names and locations of key vendors, current hardware configuration, names of team members, and an alternative processing location. What is the director most likely preparing?

A. Data restoration plan.

B. Disaster recovery plan.

C. System security policy.

D. System hardware policy.

Answer (B) is correct.

Disaster recovery is the process of resuming normal information processing operations after the occurrence of a major interruption. Two major types of contingencies must be planned for: those in which the data center is physically available and those in which it is not. A disaster recovery plan would include items such as names and locations of key vendors, current hardware configuration, names of team members, and an alternative processing location.

A data restoration plan would include different items than the ones being collected by the director.

A system security policy would most likely include different items.

Although a system hardware policy would include the current hardware configuration, it probably would not include the other information being collected.

97. A total interruption of processing throughout a distributed information technology system can be minimized through the use of

A. Exception reporting.

B. Fault tolerance.

C. Backup and recovery.

D. Data file security.

Answer (B) is correct.

An advantage of distributed processing is fault tolerance, that is, the ability to continue processing at all sites except a nonfunctioning one.

Exception reporting can be used to control correctness and timeliness of updates but cannot minimize the impact of an interruption.

Backup procedures are used after computer failure.

Data file security is intended to prevent unauthorized changes to data files.

98. Orientation or plan walk-through is one type of business continuity management (BCM) testing method. This method

A. Is a type of low-intensity event that does not constitute a test.

B. Reviews the written plan to ensure accuracy of the documentation.

C. Involves contacting business partners and employees.

D. Validates connectivity to the organization's production site.

Answer (A) is correct.

The orientation or plan walk-through method ensures that all team members understand their new roles and the basic plan content and format. Normally, this type of low-intensity event does not constitute a test.

- B.The desk check method reviews the written plan to ensure accuracy of the documentation.
- C.Communication testing normally involves actual contact with business partners and employees.
- D.End-to-end testing validates connectivity to the organization's production site.

99.Which of the following statements is correct regarding business continuity management (BCM) and business impact analysis (BIA)?

- A.A BIA is restricted to internal resources for recovery because external resources may not be reliable.
- B.A BIA separately defines recovery time objectives (RTO) and recovery point objectives (RPOs).
- C.Critical business processes should have been defined prior to performing a BIA.
- D.A BCM plan is communicated to key employees who are trained in crisis procedures and communications strategies.

Answer (B) is correct.

A BIA is the element of BCM that defines RTOs and RPOs for critical business processes and resources, both internal and external. An RTO is the duration of time and service level within which a process must be restored. An RPO is the amount of data the organization can afford to lose.

- A.A BIA identifies the other parties (e.g., vendors, other parts of the organization, and even competitors) and the physical resources needed for recovery.
- C.Planning and preparation for BCM occur prior to an emergency. The identification of critical business processes is appropriately done in the BIA performed as part of business continuity planning.
- D.All team members should understand their new roles and the basic plan content and format.

100.Which of the following should be management's primary concern when reviewing a reciprocal disaster recovery agreement between two organizations?

- A.The reliability of the business impact analysis.
- B.Hardware and software compatibility.
- C.Frequency of system testing.
- D.Differences in information system policies and procedures.

Answer (B) is correct.

A reciprocal disaster recovery agreement is an agreement between two or more organizations to share their resources after a major interruption. The primary concern when reviewing the agreement is whether the hardware and software of the participating organizations are compatible.

- A.A business impact analysis identifies business processes necessary to functioning in a disaster and determines how soon they should be recovered. This analysis is a primary concern when creating a disaster recovery plan, not when reviewing a reciprocal disaster recovery agreement.
- C.The frequency of system testing is a lesser concern than the functionality of the backup resources.
- D.Differences in information system policies and procedures is a secondary concern.

PART 3 Unit 9

Question: 1 ABC operates a catering service that specializes in business luncheons for large corporations. ABC requires customers to place their orders 2 weeks in advance of the scheduled events. ABC bills its customers on the 10th day of the month following the date of service and requires that payment be made within 30 days of the billing date. Conceptually, ABC should recognize revenue from its catering services at the date when a

- A. Customer places an order.
- B. Luncheon is served.
- C. Billing is mailed.
- D. Customer's payment is received.

Answer (B) is correct.

An entity recognizes revenue when (or as) it satisfies a performance obligation by transferring a promised good or service (an asset) to a customer. Accordingly, ABC recognizes revenue when a luncheon is served.

- A . The certainty and measurability criteria are not met when the customer places an order.
- C . The date for billing is a matter of administrative procedure and convenience. The revenue should be recognized at the date the service was performed.
- D . The revenue should be recognized at the point of performance of the service. To wait until the receivable is collected is to ignore the accrual basis of accounting, which is identified in the Framework for the Preparation and Presentation of Financial Statements as an underlying assumption of financial accounting.

Question: 2 A company provides fertilization, insect control, and disease control services for a variety of trees, plants, and shrubs on a contract basis. For US \$50 per month, the company will visit the subscriber's premises and apply appropriate mixtures. If the subscriber has any problems between the regularly scheduled application dates, the company's personnel will promptly make additional service calls to correct the situation. Some subscribers elect to pay for an entire year because the company offers an annual price of US \$540 if paid in advance. For a subscriber who pays the annual fee in advance, the company should recognize the related revenue

- A. When the cash is collected.
- B. Evenly over the year as the services are performed.
- C. At the end of the contract year after all of the services have been performed.
- D. At the end of the fiscal year.

Answer (B) is correct.

An entity recognizes revenue when (or as) it satisfies a performance obligation by transferring a promised good or service (an asset) to a customer. A performance obligation can be satisfied either over time or at a point in time. Under the former scenario, an entity recognizes revenue as it satisfies the performance obligation. Thus, the company should recognize the advancement evenly over the year as the services are performed.

A . A liability is recognized when the cash is collected prior to the rendition of the service.

C . Revenue from services rendered is recognized when the services have been performed. A portion of the services is performed monthly. Thus, a portion of the related revenue should be recognized monthly rather than waiting until the entire contract year is complete.

D . A portion of the related revenue should be recognized monthly rather than waiting until the entire fiscal year is complete.

Question: 3 An entity sells a durable good to a customer on January 1, Year 1, and the customer is automatically given a 1-year warranty. The customer also buys an extended warranty package, extending the coverage for an additional 2 years to the end of Year 3. At the time of the original sale, the company expects warranty costs to be incurred evenly over the life of the warranty contracts. The customer has only one warranty claim during the 3-year period, and the claim occurs during Year 2. The company will recognize income from the sale of the extended warranty

A. On January 1, Year 1.

B. In Year 2 and Year 3.

C. At the time of the claim in Year 2.

D. December 31, Year 3, when the warranty expires.

Answer (B) is correct.

Under the matching principle, expenses are recognized in the same period as the related revenues. Because warranty costs are expected to be incurred evenly over the life of the warranty contracts, the earning process (the provision of warranty coverage) also occurs evenly over the 2-year period. Thus, income should be recognized on the straight-line basis over the life of the extended warranty contract.

A . The recognition of income from the sale of the extended warranty is deferred until the extended warranty period begins.

C . The income should be recognized evenly over the life of the contract. It is not related to the timing of the claims.

D . Income is recognized over the life of the warranty, not at expiration.

Question: 4 An entity with total assets of US \$100,000,000 and profit of US \$9,000,000 purchases staplers with an estimated life of 10 years for US \$1,000. In connection with the purchase, the company debits miscellaneous expense. This scenario is most closely associated with which of the following concepts or principles?

- A. Materiality and going concern.
- B. Relevance and neutrality.
- C. Reliability and comparability.
- D. Materiality and the balance between cost and benefit.

Answer (D) is correct.

In principle, assets with a limited economic life should be capitalized and depreciated. However, the effect on the financial statements of expensing rather than capitalizing and depreciating the staplers is clearly not material given that they cost US \$1,000 and the entity has total assets of US \$100,000,000. The choice of treatment is not likely to influence the decisions of financial statement users. The balance between benefit and cost is a pervasive constraint. The benefits should exceed the cost of information. Specifically, the cost of producing the information about depreciation expense over 10 years for the staplers probably is higher than the benefits of the information for decision making. Thus, the expedient procedure of expensing the US \$1,000 should be followed.

- A . The going-concern principle relates to circumstances in which there is doubt as to the viability of the entity. Materiality is an entity-specific aspect of relevance.
- B . Relevance is a fundamental qualitative characteristic of information in financial statements. Information is relevant if it makes a difference in user decisions. Thus, it permits users to predict the outcome of future events or confirm or correct their prior expectations.
- C . Comparability is an enhancing qualitative characteristic. Financial statements must be comparable for the same entity over time and also among different entities. Information is relevant if it makes a difference in user decisions. Thus, it permits users to predict the outcome of future events or confirm or correct their prior expectations.

Question: 5 The amortization of intangible assets with finite useful lives is justified by the

- A. Economic entity assumption.
- B. Going concern assumption.
- C. Monetary unit assumption.
- D. Historical cost assumption.

Answer (B) is correct.

Every business is assumed to be a going concern that will continue operating indefinitely. Thus, liquidation values are not important. For example, if an entity is not a going concern, its intangible assets are reported at liquidation values, not at historical cost net of amortization.

- A . The economic entity assumption is that every entity's affairs are separate from those of its owners.
- C . The monetary unit assumption provides that all transactions and events can be measured in terms of money.
- D . The historical cost principle deems cost to be the most objective and reliable measure.

Question: 6 On February 1, Year 1, a computer software firm agrees to program a software package for US \$100,000, with the payment made on March 1, Year 1. The software is accepted by the client June 1, Year 2. How much Year 1 revenue should be recognized?

- A. US \$0
- B. US \$100,000
- C. US \$50,000
- D. US \$75,000

Answer (A) is correct.

An entity recognizes revenue when (or as) it satisfies a performance obligation by transferring a promised good or service (an asset) to a customer. A contract liability is recognized for an entity's obligation to transfer goods or services to a customer for which the entity has received consideration from the customer. Deposits and other advance payments by the customer are recognized as contract liabilities. Thus, no revenue is recognized in Year 1 because all performance occurred in Year 2. However, a contract liability for US \$100,000 is recognized in Year 1 because it represents consideration received from the customer in Year 1 for a promise the firm was still obligated to perform at the end of Year 1.

- B . The amount of the software firm's contract liability (unearned revenue), not its revenue, is US \$100,000.
- C . Revenue is recognized when the entity satisfies the performance obligation by providing the client with the software package.
- D . Revenue is recognized when the entity satisfies the performance obligation by providing the client with the software package.

Question: 7 An airline should recognize revenue from airline tickets in the period when

- A. Passenger reservations are booked.

- B. Passenger reservations are confirmed.
- C. Tickets are issued.
- D. Related flights occur.

Answer (D) is correct.

An entity recognizes revenue when (or as) it satisfies a performance obligation by transferring a promised good or service (an asset) to a customer. An airline's performance obligation regarding airline tickets is to ensure promised flights occur. Thus, an airline should recognize revenue from airline tickets when related flights occur.

- A . On the date the reservations are booked, the earning process is not substantially completed.
- B . Revenue cannot be recognized on the date the reservations are confirmed because the airline has not yet fulfilled its obligation.
- C . Issuing the tickets does not establish the completion of the earning process.

Question: 9 In December Year 1, catalogs were printed for use in a special promotion in January Year 2. The catalogs were delivered by the printer on December 13, Year 1, with an invoice for US \$70,000 attached. Payment was made in January Year 2. The US \$70,000 should be reported as a deferred cost at the December 31, Year 1, reporting date because of the

- A. Matching principle.
- B. Revenue recognition principle.
- C. Faithful representation principle.
- D. Cost principle.

Answer (A) is correct.

Matching is the simultaneous or combined recognition of revenues and expenses resulting directly and jointly from the same transactions or other events. Expenses should be associated with the revenues that they help to create. Because the catalogs are still on hand at the reporting date, they will not contribute to an inflow of economic benefits until the next period. Hence, the cost should be deferred and matched with the revenues of the following period.

- B . The revenue recognition principle determines the period in which revenue is recognized.
- C . Faithful representation is a fundamental qualitative characteristic of financial information.
- D . Cost is a pervasive constraint on financial information. It is also the basis of measurement of many assets and liabilities.

Question: 10 To comply with the matching principle, the cost of labor services of an employee who participates in the manufacturing of a product normally should be charged to the income statement in the period in which the

- A. Work is performed.
- B. Employee is paid.
- C. Product is completed.
- D. Product is sold..

Answer (D) is correct.

The matching principle states that expenses should be recognized in the same period as the revenues that those expenses helped produce. Revenues related to the employee's labor are not recognized until the goods are sold.

- A . The matching principle requires labor costs to be matched in the same period as the related costs.
- B . Adherence to the accrual basis of accounting prohibits recognition of expenses based solely on the timing of cash disbursement.
- C . The goods have not yet generated revenue when the production process is completed.

Question: 11 A newly acquired plant asset is to be depreciated over its useful life. The rationale for this process is the

- A. Economic entity assumption.
- B. Monetary unit assumption.
- C. Materiality assumption.
- D. Going concern assumption.

Answer (D) is correct.

A basic feature of financial accounting is that the entity is assumed to be a going concern in the absence of evidence to the contrary. The going concern concept is based on the empirical observation that many entities have an indefinite life. The reporting entity is assumed to have a life long enough to fulfill its objectives and commitments and therefore to depreciate wasting assets over their useful lives.

- A . The economic entity assumption provides that economic activity can be identified with a particular unit of accountability.
- B . The monetary unit assumption provides that all transactions and events can be measured in terms of a common denominator, for instance, the euro.

C . Materiality is an entity-specific aspect of relevance, a fundamental qualitative characteristic. Information is material if it can influence a user's decision. Thus, in the case of plant assets, certain items may be expensed rather than capitalized and depreciated because they are not material. The difference in treatment is not large enough to influence users if the item is not material.

Question: 12 An objective of financial reporting is

- A. Providing information useful to investors, creditors, donors, and other users for decision making.
- B. Assessing the adequacy of internal control.
- C. Evaluating management results compared with standards.
- D. Providing information on compliance with established procedures.

Answer (A) is correct.

The objective is to report financial information that is useful in making decisions about providing resources to the reporting entity. Primary users of financial information are current or prospective investors and creditors who cannot obtain it directly. Their decisions depend on expected returns.

B . Assessing the adequacy of internal control is a function of internal auditing, not financial reporting.

C . Evaluating management results compared with standards is a function of internal auditing, not financial reporting.

D . Providing information on compliance with established procedures is a function of internal auditing, not financial reporting.

Question: 13 The measurement basis most often used to report a long-term payable representing a commitment to pay money at a determinable future date is

- A. Historical cost.
- B. Current cost.
- C. Net realizable value.
- D. Present value of future cash flows.

Answer (D) is correct.

The measurement basis most commonly adopted by entities in preparing their financial statements is historical cost. However, it is usually combined with other measurement bases (attributes). The attribute used to measure a long-term receivable or payable is the present or discounted value of its future cash flows.

- A . Historical cost is used to measure property, plant, and equipment and most inventories.
- B . Some inventories are measured at current (replacement) cost.
- C . Short-term receivables and some inventories are reported at net realizable value.

Question: 14 The assets of a liquidating entity should be shown on the statement of financial position at their

- A. Undepreciated historical cost.
- B. Fair value.
- C. Realizable value.
- D. Current cost.

Answer (C) is correct.

When liquidation is imminent and the going concern assumption is no longer valid, the most appropriate measurement attribute for assets is realizable value, which is the amount of cash currently obtainable by sale in an orderly disposal.

A . A going concern should report assets at their undepreciated historical cost. When liquidation appears imminent, historical cost is inappropriate for the statement of financial position.

B . An entity facing liquidation is expected to dispose of its assets in a forced or distress sale and is unlikely to realize the fair value amount. The net realizable value of the assets is the appropriate amount for reporting purposes.

D . Current cost is only appropriate when the going concern assumption is applicable and the effects of changing prices are to be measured and reported in the financial statements.

Question: 15 On January 1, a new landscaping firm, Bandit26 Co., acquired a fleet of vehicles, all the necessary tools and equipment, and a parking and storage facility. It began operations immediately. It is now the end of the first year of operations, and the first set of year-end financial statements is being prepared.

At year end, the parking and storage facility that was purchased for US \$150,000 has a fair value of US \$250,000. Bandit26 Co. will report a value of <List A> for the parking and storage facility if it prepares financial reports consistent with the <List B> principle.

	<u>List A</u>	<u>List B</u>
A.	US \$150,000	Matching
B.	US \$150,000	Historical cost
C.	US \$250,000	Going concern
D.	US \$250,000	Revenue recognition

Answer (B) is correct.

An asset classified under property, plant, and equipment is measured initially at historical cost. This measurement basis has the advantages of reliability and objectivity.

A . The matching principle requires the recognition of related revenues and expenses in the same accounting period.

C . The going-concern assumption is that the enterprise will continue in existence indefinitely.

D . Revenue recognition principles refer to the timing of revenue recognition, not to the valuation basis for property, plant, and equipment.

Question: 16 Because of inexact estimates of the service life and the residual value of a plant asset, a fully depreciated asset was sold in the current year at a material gain. This gain most likely should be reported

A. In the other revenues and gains section of the current income statement.

B. As part of sales revenue on the current income statement.

C. In the extraordinary item section of the current income statement.

D. As an adjustment to prior periods' depreciation on the statement of changes in equity.

Answer (A) is correct.

Revenues occur in the course of ordinary activities. Gains may or may not occur in the course of ordinary activities. For example, gains may occur from the sale of noncurrent assets. Thus, the gain on the sale of a plant asset is not an operating item and should be classified in an income statement with separate operating and nonoperating sections in the other revenues and gains section.

- B . The asset sold was not inventory.
- C . No transaction is recorded as an extraordinary item under U.S. GAAP or IFRS.
- D . The transaction is not the correction of an error in the financial statements of a prior period.

Question: 17 The management of ABC Corporation is analyzing the financial statements of XYZ Corporation because ABC is strongly considering purchasing a block of XYZ ordinary shares that would give ABC significant influence over XYZ. Which financial statement should ABC primarily use to assess the amounts, timing, and certainty of future cash flows of XYZ Company?

- A. Income statement.
- B. Statement of changes in equity.
- C. Statement of cash flows.
- D. Statement of financial position.

Answer (C) is correct.

A statement of cash flows provides information about the cash receipts and cash payments of an entity during a period. This information helps investors, creditors, and other users to assess the entity's ability to generate cash and cash equivalents and the needs of the entity to use those cash flows. Historical cash flow data indicate the amount, timing, and certainty of future cash flows. It is also a means of verifying past cash flow assessments and of determining the relationship between profits and net cash flows and the effects of changing prices.

- A . The statement of income is prepared on an accrual basis and is not meant to report cash flows.
- B . The statement of changes in equity is prepared on the accrual basis.
- D . The statement of financial position reports on financial position at a moment in time.

Question: 18 In recording transactions, which of the following best describes the distinction between expenses and losses?

- A. Losses are extraordinary charges to income, whereas expenses are ordinary charges to income.
- B. Losses are material items, whereas expenses are immaterial items.
- C. Expenses arise in the course of ongoing major or central operations, whereas losses do not.
- D. Expenses can always be prevented, whereas losses can never be prevented.

Answer (C) is correct.

Expenses are outflow or other usage of assets or incurrences of liability (or both) from activities that qualify as ongoing major or central operations. Losses are decreases in equity (or net assets) other than from expenses or distributions to owners. For example, losses may result from the sale of noncurrent assets or from natural disasters.

- A . No transaction is recorded as an extraordinary item under U.S. GAAP or IFRS.
- B . Losses may be immaterial, and most expenses are material.
- D . Some expenses cannot be prevented, or at least not in the short run. Some losses can be prevented.

Question: 19 An entity has a 50% gross margin, general and administrative expenses of US \$50, interest expense of US \$20, and net income of US \$20 for the year just ended. Ignoring the effects of income tax, the level of sales revenue for the year just ended was

- A. US \$90
- B. US \$135
- C. US \$140
- D. US \$180

Answer (D) is correct.

Net income equals sales minus cost of sales, G&A expenses, interest, and tax. Ignoring the effects of income tax, income before tax is US \$20 (net income). Accordingly, income before interest and tax must have been US \$40 (\$20 income before tax + \$20 interest), and the gross profit (sales – cost of sales) must have been US \$90 (\$40 income before interest and tax + \$50 G&A expenses). If the gross margin is 50% of sales, sales equals US \$180 (\$90 gross profit ÷ 0.5).

- A . The amount of US \$90 is the gross profit.
- B . The amount of US \$135 is 150% of the gross profit.
- C . The amount of US \$140 results from not adding back interest expense.

Question: 20 Assume that employees confessed to a US \$500,000 inventory theft but are not able to make restitution. How should this material fraud be shown in the company's financial statements?

- A. Classified as a loss and shown as a separate line item in the income statement.
- B. Initially classified as an accounts receivable because the employees are responsible for the goods. Because they cannot pay, the loss would be recognized as a write-off of accounts receivable.
- C. Included in cost of goods sold because the goods are not on hand, losses on inventory shrinkage are ordinary, and it would cause the least amount of attention.

D. Recorded directly to retained earnings because it is not an income-producing item.

Answer (A) is correct.

Losses may or may not occur in the course of ordinary activities. For example, they may result from nonreciprocal transactions (e.g., theft), reciprocal transactions (e.g., a sale of plant assets), or from holding assets or liabilities. Losses are typically displayed separately.

B . No restitution will be made. Thus, recording the item as a receivable, then writing it off, is not consistent with the substance of the event.

C . Although some inventory shrinkage is expected in the normal course of processing, fraud is abnormal. Hence, the item should be recorded as a loss.

D . Losses are included in the determination of income or loss.

Question: 21 A financial statement includes all of the following items: net income, depreciation, operating activities, and financing activities. What financial statement is this?

A. Statement of financial position.

B. Income statement.

C. Statement of cash flows.

D. Statement of changes in equity.

Answer (C) is correct.

A statement of cash flows is a required financial statement. It provides information about cash receipts and payments by reporting the cash effects of an enterprise's operating, investing, and financing activities. Related disclosures report the effects of noncash investing and financing activities. If the statement is presented using the indirect method, it will reconcile net income or loss to net cash from (used in) operating activities. Depreciation, a noncash expense, is included in this presentation.

A . The statement of financial position does not include periodic profit or loss or depreciation expense.

B . The income statement does not have captions for operating and financing activities.

D . The statement of changes in equity does not include captions for operating and investing activities and depreciation.

Question: 22 Which of the following is a noncash item?

A. Administrative expense.

B. Interest expense.

- C. Income tax expense.
- D. Depreciation expense.

Answer (D) is correct.

Depreciation expense is a noncash charge. It represents the allocation of the historical cost of assets to the time periods in which they are used to generate revenues.

- A . Administrative expense is a cash charge.
- B . Interest expense is a cash charge.
- C . Income tax expense is a cash charge.

Question: 23 In a statement of cash flows (indirect method), depreciation expense should be presented as

- A. An inflow of cash.
- B. An outflow of cash.
- C. An addition to net income in converting net income or loss to net cash flows from operating activities.
- D. A deduction from net income in converting net income or loss to net cash flows from operating activities.

Answer (C) is correct.

Under the indirect method, net income is reconciled to cash flow from operating activities. The net income for the period was calculated using the accrual method of accounting. Depreciation expense is a noncash expense included in net income. Thus, it must be added to net income to determine the net cash flow from operating activities.

- A . Depreciation does not involve an inflow or outflow of cash. Depreciation is a noncash operating expense.
- B . Depreciation is a noncash operating expense.
- D . Depreciation expense should be added.

Question: 24 On January 1, Year 1, an entity paid US \$18,000 to renew its only insurance policy for a 3-year period beginning on that date. This transaction has not been recorded. What amounts should be reported for prepaid insurance and insurance expense in the annual financial statements prepared at December 31?

	<u>Prepaid Insurance</u>	<u>Insurance Expense</u>
A.	US \$18,000	US \$6,000
B.	US \$12,000	US \$6,000
C.	US \$18,000	US \$0
D.	US \$0	US \$6,000

Answer (B) is correct.

The insurance policy was in effect at the beginning of the year. The amount of the prepayment on the new policy to be expensed is US \$6,000 ($\$18,000 \div 3$ -year duration of the policy). The debit balance in prepaid insurance at year end is therefore US \$12,000 ($\$18,000 - \$6,000$), and total insurance expense is US \$6,000.

A . Prepaid insurance must be expensed for the amount used.

C . Insurance expense should be recognized for the year and should be subtracted from the balance in prepaid insurance.

D . The insurance policy is for 3 years, not 1 year.

Question: 25 In the determination of cost of goods sold, <List A> must be <List B> cash payments for goods along with other adjustments.

	List A	List B
A.	An increase in accounts payable	Added to
B.	A decrease in accounts payable	Added to
C.	An increase in inventory	Added to
D.	A decrease in inventory	Subtracted from

Answer (A) is correct.

To convert from the cash basis (cash payments) to the accrual basis (cost of goods sold), an increase in accounts payable must be added to cash payments for goods to determine net purchases. Net purchases is then adjusted for the change in inventory to determine cost of goods sold.

B . A decrease in accounts payable must be subtracted from, not added to, cash payments.

C . An increase in inventory must be subtracted from, not added to, cash payments to calculate cost of goods sold.

D . A decrease in inventory must be added to, not subtracted from, cash payments to calculate cost of goods sold.

Question: 26 An entity had cash receipts from sales of US \$175,000 during Year 2. At the end of Year 1, the company had US \$40,000 of deferred revenue, all of which was earned in Year 2. The company's sales revenue for Year 2 would be

- A. US \$40,000
- B. US \$135,000
- C. US \$175,000
- D. US \$215,000

Answer (D) is correct.

The sales revenue earned in Year 2 equals Year 2 cash receipts (assuming no deferred revenue from Year 2 sales), plus the revenue earned from cash receipts in Year 1, or US \$215,000 (\$175,000 + \$40,000).

- A . The amount of US \$40,000 equals the deferred revenue in Year 1 that was earned in Year 2.
- B . The amount of US \$135,000 results from subtracting, rather than adding, the Year 1 receipts for which revenue was earned in Year 2.
- C . The amount of US \$175,000 equals the cash receipts for Year 2.

Question: 27 On January 1, Year 1, an entity recorded the purchase of an asset correctly at US \$75,132. No down payment of was made, and the balance of US \$100,000 is due in 3 years at an imputed annual interest rate of 10%. What is the Year 1 interest to record on the payable?

- A. US \$7,513
- B. US \$8,289
- C. US \$10,000
- D. US \$22,540

Answer (A) is correct.

The balance outstanding during the year was US \$75,132. At an interest rate of 10%, the entity should accrue US \$7,513.20 ($\$75,132 \times 10\%$) of interest for the year.

- B . The balance due in 3 years minus the balance outstanding during the year divided by 3 equals US \$8,289 [$(\$100,000 - \$75,132) \div 3$].
- C . The face amount due multiplied by 10% equals US \$10,000.
- D . The interest rate multiplied by the Year 1 balance multiplied by 3 years equals US \$22,540 ($\$75,132 \times 10\% \times 3$).

Question: 28 On April 1, a company arranged a US \$100,000, 10% bank loan. Interest payments of US \$10,000 are due on April 1 of each year during the 5-year term of the loan. If the company reports expenses on an accrual basis, interest expense for the first year of operations is

- A. US \$0
- B. US \$7,500
- C. US \$10,000
- D. US \$12,500

Answer (B) is correct.

Interest expense for the first year equals the 9 months' accrued interest at year end, or US \$7,500 [$\$10,000 \times (9 \div 12)$].

- A . Interest expense under the cash basis is US \$0.
- C . Interest expense for a full year is US \$10,000.
- D . Interest expense for 15 months is US \$12,500.

Question: 29 An entity that sprays chemicals in residences to eliminate or prevent infestation of insects requires that customers prepay for 3 months' service at the beginning of each new quarter. Select the term that appropriately describes this situation from the viewpoint of the entity.

- A. Deferred income.
- B. Earned income.
- C. Accrued income.
- D. Prepaid expense.

Answer (A) is correct.

An entity recognizes revenue for the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in the exchange. Revenue is recognized when the performance obligation is satisfied. Consideration received for an obligation yet to be satisfied (i.e., advance payment) is recorded as deferred (or unearned) income, which is a liability account.

- B . The income is not earned. The exterminator has not performed the related services for the customer.
- C . Accrued income has met the recognition criteria but has not been received.
- D . The customer has a prepaid expense (expense paid but not incurred).

Question: 30 A manufacturer receives an advance payment for special-order goods that are to be manufactured and delivered within the next year. The advance payment should be reported in the manufacturer's current-year statement of financial position as a(n)

- A. Current liability.
- B. Noncurrent liability.
- C. Contra asset amount.
- D. Accrued revenue.

Answer (A) is correct.

An entity recognizes revenue for the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in the exchange. Revenue is

recognized when the performance obligation is satisfied. Consideration received for an obligation yet to be satisfied (i.e., advance payment) is recorded as deferred (or unearned) income, which is a liability account. Because the manufacturer must deliver the goods within the next year, this liability is current.

B . The obligation is current.

C . A contra account reduces the valuation of the related account.

D . Revenue cannot be accrued because the manufacturer has not yet delivered the goods.

Question: 31 On December 31, Year 3, a company prepaid the US \$72,000 rental fee for a parking lot it leases. The rental fee covered a 3-year period beginning January 1, Year 3. What is the effect of this transaction on the December 31, Year 3, financial statements for each of the following?

	<u>Current Expenses</u>	<u>Prepaid Expenses</u>
A.	US \$0	US \$72,000
B.	US \$22,000	US \$50,000
C.	US \$24,000	US \$48,000
D.	US \$72,000	US \$0

Answer (C) is correct.

Under the matching principle, expenses should be recognized in the same period as the related revenues. The US \$72,000 rental fee should be recognized as expense evenly over the 36-month duration of the lease. In Year 3, US \$24,000 should be debited to current expenses $[(US \$72,000 \div 36 \text{ months}) \times 12 \text{ months}]$, and US \$48,000 should be deferred as prepaid expense.

A . The expenses relating to the current year need to be recognized

B . The expense recognized for 11 months instead of the 12 months from January 1, Year 3, to December 31, Year 3, is US \$22,000.

D . Only those expenditures related to the current year should be expensed.

Question: 32 The publisher of a popular magazine offers a special discounted price for a 3-year subscription. At the end of the reporting period, the amount that has already been collected but pertains to future periods is best referred to as

- A. Accrued subscriptions revenue (an asset account).
- B. Deferred subscriptions revenue (a liability account).
- C. Earned subscriptions revenue (a revenue account).
- D. Precollected subscriptions receivable (a deferred asset account).

Answer (B) is correct.

Revenue is recognized when the performance obligation is satisfied. When it is received in advance, the amount applicable to future periods is deferred. But, the entity still must satisfy an obligation to perform in the future before it is entitled to the future economic benefits. The amount received in advance is a liability because it represents a present obligation resulting from a past event. Accordingly, deferred or unearned revenue is an amount that has been received but that has not met the recognition criteria for revenue.

- A . An accrued revenue is revenue that has met the recognition criteria but has not been received.
- C . The revenue will be recognized in future periods when forthcoming issues of the magazine are published and distributed to the subscribers.
- D . “Precollected receivable” is not a standard accounting term.

Question: 33 The failure to record an accrued expense at year end will result in which of the following overstatement errors in the financial statements prepared at that date?

	<u>Income</u>	<u>Working Capital</u>	<u>Cash</u>
A.	No	No	Yes
B.	No	Yes	No
C.	Yes	No	No
D.	Yes	Yes	No

Answer (D) is correct.

An accrued expense is an expense that has been incurred but not paid. The appropriate adjusting entry to record an accrued expense increases an expense and increases a liability. The failure to record an accrued expense results in an understatement of expenses leading to an overstatement of income. The

failure to record the increase in a liability results in an understatement of current liabilities leading to an overstatement of working capital. Cash is not affected.

A . The failure to record an accrued expense results in an overstatement of income and an overstatement of working capital and has no effect on cash.

B . The failure to record an accrued expense results in an overstatement of income.

C . The failure to record an accrued expense results in an overstatement of working capital.

Question: 34 Which of the following statements is the best description of reversing entries?

A. The recording of reversing entries is a mandatory step in the accounting cycle.

B. Reversing entries are made at the end of the next accounting period, after recording regular transactions of the period.

C. Reversing entries are identical to the adjusting entries made in the previous period.

D. Reversing entries are the exact opposite of the adjustments made in the previous period.

Answer (D) is correct.

Reversing entries are made at the beginning of a period to reverse the effects of adjusting entries made at the end of the preceding period. They are optional entries made for the sake of convenience in recording the transactions of the period. In order for reversing entries to reverse the prior adjustments, they must be the exact opposite of the adjustments made in the previous period.

A . Reversing entries are optional.

B . Reversing entries are made at the beginning of the next accounting period.

C . Reversing entries are the exact opposite of the adjustments made in the previous period.

Question: 35 The required adjusting entry to record US \$1,700 of salaries and wages that have been incurred and not paid is

A.	Salaries/wages expense Income summary	US \$1,700	US \$1,700
B.	Salaries/wages payable Salaries/wages expense	US \$1,700	US \$1,700
C.	Salaries/wages expense Salaries/wages payable	US \$1,700	US \$1,700
D.	Income summary Salaries/wages payable	US \$1,700	US \$1,700

Answer (C) is correct.

An expense incurred but not yet paid is an accrued expense. The adjusting entry to record an accrued expense of US \$1,700 for unpaid salaries and wages is to debit an expense account and credit a liability account.

- A . The income summary account is used for closing entries, not adjusting entries.
- B . The entry shown is a reversing entry that could be made at the beginning of the subsequent period.
- D . The debit should be to an expense account.

Question: 36 The journal entry required to close a utilities expense account with a balance of US \$14,000 is

A.	Utilities expense Income summary	US \$14,000 US \$14,000
B.	Income summary Utilities expense	US \$14,000 US \$14,000
C.	Rental revenue Utilities expense	US \$14,000 US \$14,000
D.	Utilities expense Retained earnings	US \$14,000 US \$14,000

Answer (B) is correct.

All income statement account balances are closed either to a summary account (such as income summary or revenue and expense summary) or to retained earnings. The normal balance of an expense account is a debit. Thus, an expense account is credited in a closing entry.

A . An expense account should be credited in a closing entry, and the income summary account should be debited.

C . An expense account should not be closed to a revenue account. Such offsetting is not good practice.

D . An expense account should be credited in a closing entry.

Question: 37 A company purchased US \$50,000 worth of office supplies on January 1 and had US \$15,000 of office supplies still on hand at year-end. If the initial purchase of supplies entry on January 1 was to debit office supplies expense and to credit cash for US \$50,000, the adjusting entry on December 31 will be

A.	Office supplies Office supplies expense	US \$15,000	US \$15,000
B.	Office supplies expense Office supplies	US \$15,000	US \$15,000
C.	Office supplies Office supplies expense	US \$35,000	US \$35,000
D.	Office supplies expense Office supplies	US \$35,000	US \$35,000

Answer (A) is correct.

Because the initial entry recorded the entire purchase to a nominal account, the year-end adjusting entry must debit a prepaid asset to reflect the remaining supplies on hand of US \$15,000. The adjusting entry must also credit (reduce) expenses for the US \$15,000 of supplies that were not used during the period.

B . The reversing entry is to debit expense and credit a prepaid asset.

C . The appropriate amount is US \$15,000, not US \$35,000.

D . The closing entry would have been to debit expense and credit a prepaid asset if the initial entry had been to a real account.

Question: 38 The purpose of an entry that contains a debit to prepaid property taxes and a credit to property tax expense is to recognize a(n)

A. Prepaid expense.

B. Accrued expense.

C. Prepaid income.

D. Expired cost.

Answer (A) is correct.

An entry debiting prepaid property taxes and crediting property tax expense is needed at the reporting date when prepayments are initially recorded in an expense account. This adjusting entry defers expense recognition to the future period in which the property taxes apply.

- B . The entry records an asset.
- C . The entry records an asset.
- D . The entry records an unexpired cost (an asset).

Question: 39 What are the effects of an adjusting entry used to accrue revenue from credit sales?

	<u>Assets</u>	<u>Liabilities</u>	<u>Equity</u>
A.	Decrease	No effect	Decrease
B.	Increase	No effect	Increase
C.	No effect	Decrease	Increase
D.	No effect	Increase	Decrease

Answer (B) is correct.

The journal entry to accrue revenue requires a debit to a receivable account and a credit to a revenue account. Thus, the accrual of revenue increases assets and equity.

- A . The accrual of revenue increases assets, increases equity, and has no effect on liabilities.
- C . The accrual of revenue increases assets, increases equity, and has no effect on liabilities.
- D . The accrual of revenue increases assets, increases equity, and has no effect on liabilities.

Question: 40 Which adjusting entry should a company use on December 31 to account for interest expense on US \$1,000,000 of long-term debt that pays annual interest of 10% and was issued on July 1?

A.	Interest expense Interest payable	US \$100,000	US \$100,000
B.	Interest expense Cash	US \$ 50,000	US \$ 50,000
C.	Interest payable Interest expense	US \$100,000	US \$100,000
D.	Interest expense Interest payable	US \$ 50,000	US \$ 50,000

Answer (D) is correct.

The debt was issued on July 1 and has been outstanding for 6 months. Interest expense equals the face amount of the debt multiplied by the interest rate and the fraction of the year the debt was outstanding [$\text{US } \$1,000,000 \times 10\% \times (6 \div 12) = \text{US } \$50,000$]. Because interest is payable on July 1, 6 months' interest is accrued and expensed in the current period.

- A . The debt has been outstanding for only 6 months, so accrued interest is only US \$50,000.
- B . The debt pays annual interest on July 1, and no cash outlay is required at year end.
- C . Accrued interest is US \$50,000. Also, interest expense is debited and interest payable is credited.

Question: 41 In performing an audit, you encounter an adjusting journal entry recorded at year end that contains a debit to rental revenue and a credit to unearned rental revenue. The purpose of this journal entry is to record

- A. Accrued revenue.
- B. Unexpired cost.
- C. Expired cost.
- D. Deferred revenues.

Answer (D) is correct.

A deferred revenue is a revenue item that has been received but has not met the recognition criteria. The journal entry described in the question is an adjusting entry to transfer an amount from the revenue

account to a liability (deferred revenue) account. The initial collection of cash in advance from the tenant was apparently recorded by a credit to revenue. An adjusting entry is therefore required at year end to transfer any remaining amount that does not qualify for revenue recognition.

A . An accrued revenue has met the recognition criteria but has not yet been received. The journal entry described indicates that collection has been made.

B . The entry concerns a revenue rather than an expense transaction.

C . The entry concerns a revenue rather than an expense transaction.

Question: 42 Statements of financial position on December 31, Year 1, and December 31, Year 2, are presented below:

	Dec. 31, Year 1	Dec. 31, Year 2
Assets:		
Cash	US \$ 50,000	US \$ 60,000
Accounts receivable	95,000	89,000
Inventory	120,000	140,000
Property, plant, and equipment	295,000	340,000
Accumulated depreciation	(106,000)	(122,000)
Total Assets	<u><u>US \$ 454,000</u></u>	<u><u>US \$ 507,000</u></u>
Liabilities and equity:		
Trade accounts payable	US \$ 62,000	US \$ 49,000
Interest payable	8,000	11,000
Bonds payable	200,000	200,000
Unamortized bond discount	(15,000)	(10,000)
Equity	199,000	257,000
Total liabilities and equity	<u><u>US \$ 454,000</u></u>	<u><u>US \$ 507,000</u></u>
Additional information for Year 2:		
<ul style="list-style-type: none"> • Sales revenue was US \$338,000. 		
Cash collections from customers in Year 2 were		

A. US \$332,000

B. US \$338,000

C. US \$344,000

D. US \$249,000

Answer (C) is correct.

Cash collections from customers equal beginning accounts receivable, plus sales revenue, minus ending accounts receivable. In Year 2, cash collections from customers were US \$344,000 (\$95,000 + \$338,000 – \$89,000).

A . The amount of US \$344,000 results from subtracting beginning accounts receivable and adding ending accounts receivable.

B . The amount of US \$338,000 is the sales revenue for the year.

D . The amount of US \$249,000 equals sales revenue minus ending accounts receivable.

Question: 43 On January 1, a new landscaping firm, Bandit27 Co., acquired a fleet of vehicles, all the necessary tools and equipment, and a parking and storage facility. It began operations immediately. It is now the end of the first year of operations, and the first set of year-end financial statements is being prepared.

During the first year of operations, the company experienced a 5% bad debt rate on credit sales. None of the bad debts are expected to be recovered, given that 5% is the industry average level of bad debts. Total credit sales for the year were US \$400,000. The year-end balance of accounts receivable includes uncollected overdue accounts of US \$100,000. Half of the uncollected overdue amounts are estimated to be uncollectible. If Bandit27 Co. uses the <List A> approach to estimate bad debt expense, the estimated bad debt expense will be <List B>.

	<u>List A</u>	<u>List B</u>
A.	Statement of financial position	US \$20,000
B.	Statement of financial position	US \$100,000
C.	Income statement	US \$20,000
D.	Income statement	US \$50,000

Answer (C) is correct.

Using the income statement approach, the bad debt expense is determined using a percentage of total credit sales. Bad debt expense is therefore US \$20,000 ($\$400,000$ credit sales \times 5% estimated bad debt rate).

A . The amount of US \$20,000 is the bad debt expense calculated using the income statement approach.

B . Under the statement of financial position approach, the amount estimated to be uncollectible is US \$50,000 ($\$100,000 \times 50\%$).

D . The estimated bad debt expense using the statement of financial position approach is US \$50,000.

Question: 44 An analysis of an entity's US \$150,000 accounts receivable at year end resulted in a US \$5,000 ending balance for its allowance for uncollectible accounts and a bad debt expense of US \$2,000. If the beginning balance in the allowance for uncollectible accounts was US \$4,700, what was the amount of accounts receivable written off as uncollectible during the year?

- A. US \$2,700
- B. US \$2,300
- C. US \$1,700
- D. US \$3,000

Answer (C) is correct.

Under the allowance method, uncollectible accounts are written off by a debit to the allowance and a credit to accounts receivable. The US \$2,000 bad debt expense is credited to the allowance. The amount of accounts receivable written off can be calculated as follows:

Beginning allowance	US \$4,700
Bad debt expense	2,000
Ending allowance	(5,000)
A/R written off	<u>US \$1,700</u>

- A . The amount of US \$2,700 results from subtracting bad debt expense from the beginning allowance.
- B . The amount of US \$2,300 results from subtracting bad debt expense from the beginning allowance.
- D . The amount of US \$3,000 equals 2% of accounts receivable.

Question: 45 In preparing its August 31 bank reconciliation, Apex Corp. has the following information available:

Balance per bank statement, 8/31	US \$18,050
Deposit in transit, 8/31	3,250
Outstanding checks, 8/31	2,750
At August 31, Apex's cash balance is	

Answer (A) is correct.

To determine the cash balance to be recorded on the interim financial statement, the US \$18,050 balance per bank statement is adjusted for the US \$3,250 deposit in transit and the US \$2,750 of outstanding checks, resulting in a cash balance of US \$18,550.

Balance per bank statement	US \$18,050
Add: Deposit in transit	3,250
Subtract: Outstanding checks	(2,750)
Cash balance	<u>US \$18,550</u>

- B . The amount of US \$24,050 results from adding, not subtracting, the outstanding checks to the balance per bank.
- C . The amount of US \$12,050 results from subtracting, not adding, the deposits in transit from the balance per bank.
- D . The amount of US \$17,550 results from subtracting the deposit in transit and adding the outstanding checks to the balance per bank.

Question: 46 A physical inventory count showed an entity had inventory costing US \$1,000,000 on hand at December 31, Year 1. Excluded from this amount were the following:

- Goods costing US \$82,000, shipped to a customer free on board (FOB) shipping point on December 28, Year 1. They were expected to be received by the customer on January 4, Year 2.

Compute the correct ending inventory to be reported on the shipper's statement of financial position at December 31, Year 1.

- A. US \$1,000,000
- B. US \$1,082,000
- C. US \$918,000
- D. US \$1,204,000

Answer (A) is correct.

The goods shipped FOB shipping point should be counted in the buyer's, not the seller's (shipper's), inventory because title and risk of loss pass at the time and place of shipment. These goods were properly excluded from ending inventory. The correct ending inventory therefore is US \$1,000,000.

- B . The amount of US \$1,082,000 is the inventory if the shipment was FOB destination.

C . The amount of US \$918,000 results from subtracting the cost of the goods from the physical inventory.

D . The amount of US \$1,204,000 is not meaningful in this context.

Question: 47

An entity with a December 31 year end purchased US \$2,000 of inventory on account. The seller was responsible for delivery to the shipping point, with freight of US \$50 paid at destination by the buyer. The invoice date was December 27, Year 1, and the goods arrived on January 3, Year 2.

Now assume the terms required the seller to deliver to the destination instead of the shipping point. What is the correct amount of inventory relating to this purchase on the Year 1 financial statements?

- A. US \$0
- B. US \$2,000
- C. US \$50
- D. US \$2,050

Answer (A) is correct.

Title and risk of loss passed to the buyer at the destination, and the seller incurred the expense of delivery to that point. The goods did not arrive until after year end, so they should not be included in Year 1 inventory. Freight-in also should not be recorded until Year 2.

B . No inventory should be included in the Year 1 financial statements.

C . Freight-in should be recorded in Year 2.

D . No inventory should be included in the Year 1 financial statements, and freight-in should be recorded in Year 2.

Question: 48 Which of the following is not an appropriate basis for measuring the cost of property, plant, and equipment?

- A. The purchase price, freight costs, and installation costs of a productive asset should be included in the asset's cost.
- B. Proceeds obtained in the process of readying land for its intended purpose, such as from the sale of cleared timber, should be recognized immediately as income.
- C. The costs of improvements to equipment incurred after its acquisition should be added to the asset's cost if they increase future service potential.

D. All costs incurred in the construction of a plant building, from excavation to completion, should be considered as part of the asset's cost.

Answer (B) is correct.

Accordingly, items of property, plant, and equipment (PPE) that meet the recognition criterion are initially measured at cost. The cost includes the purchase price (minus trade discounts and rebates, plus purchase taxes) and the directly attributable costs of bringing the assets to working condition for their intended use. Directly attributable costs include site preparation, installation, initial delivery and handling, architect and equipment fees, costs of removing the assets and restoring the site, etc. Accordingly, the cost of land includes the cost of obtaining the land and readying it for its intended uses, but it is inappropriate to recognize the proceeds related to site preparation immediately in profit or loss. They should be treated as reductions in the price of the land.

A . The purchase price, freight costs, and installation costs of a productive asset are included in the asset's cost.

C . Subsequent costs are added to the carrying amount of an item of PPE if it is probable that, as a result, future economic benefits will be received, and the costs are reliably measurable.

D . All costs of construction should be included as a part of the asset's cost.

Question: 49 An entity installed an assembly line in Year 1. Four years later, US \$100,000 was invested to automate the line. The automation increased the market value and productive capacity of the assembly line but did not affect its useful life. Proper accounting for the cost of the automation should be to

A. Report it as an expense in Year 5.

B. Establish a separate account for the US \$100,000.

C. Allocate the cost of automation between the asset and accumulated depreciation accounts.

D. Debit the cost to the property, plant, and equipment account.

Answer (D) is correct.

Subsequent costs are added to the carrying amount of an item of PPE if it is probable that, as a result, future economic benefits will be received, and the costs are reliably measurable. An extended useful life, improved output quantity or quality, and reduced operating costs are all future economic benefits.

A . The cost should be capitalized.

B The same account should be used.

C . Allocation is not an accepted procedure.

Question: 50 The selected data from statements of financial position on December 31, Year 1, and December 31, Year 2, are presented below:

	<u>12/31/Year 1</u>	<u>12/31/Year 2</u>	Additional information for Year 2:
Property, plant, and equipment	US \$295,000	US \$275,000	• Depreciation expense was US \$30,000.
Accumulated depreciation	(102,000)	(119,000)	

The carrying amount (cost minus accumulated depreciation) of property, plant, and equipment disposed of in Year 2 was

- A. US \$7,000
- B. US \$17,000
- C. US \$20,000
- D. US \$3,000

Answer (A) is correct.

The Year 2 beginning carrying amount is US \$193,000 (\$295,000 – \$102,000), and the Year 2 ending carrying amount is US \$156,000 (\$275,000 – \$119,000). The carrying amount of PPE disposed of is US \$7,000 (\$193,000 beginning balance – \$30,000 depreciation expense – \$156,000 ending balance).

B . The amount of US \$17,000 is the difference between ending and beginning accumulated depreciation.

C . The amount of US \$20,000 is the cost of the PPE disposed.

D . The amount of US \$3,000 results from using the change in the PPE account minus the change in accumulated depreciation.

Question: 51 An entity purchased a machine on January 1, Year 1, for US \$1,000,000. The machine had an estimated useful life of 9 years and a residual value of US \$100,000. The company uses straight-line depreciation. On December 31, Year 1, the machine was sold for US \$835,000. The gain or loss that should be recorded on the disposal of this machine is

- A. US \$35,000 gain.
- B. US \$65,000 loss.
- C. US \$65,000 gain.
- D. US \$165,000 loss.

Answer (B) is correct.

The accumulated depreciation was US \$100,000 $\{[(\$1,000,000 \text{ historical cost} - \$100,000 \text{ residual value}) \div 9 \text{ years estimated useful life}] \times 1 \text{ year}\}$, so the carrying amount was US \$900,000 ($\$1,000,000 - \$100,000$). Thus, the loss was US \$65,000 ($\$900,000 \text{ carrying amount} - \$835,000 \text{ sales price}$).

A . Selling price, minus carrying amount, plus residual value equals US \$35,000 gain.

C . Cost, minus selling price, minus residual value equals US \$65,000 loss.

D . Cost minus selling price equals US \$165,000 loss.

Question: 52 Which of the following is not an appropriate basis for measuring the historical cost of property, plant, and equipment?

A. Delivery and handling costs and installation costs of a productive asset should be included in the asset's cost.

B. The cost should include the purchase price without a deduction for trade discounts.

C. The costs of improvements to equipment incurred after its acquisition should be added to the asset's cost if they provide future economic benefits exceeding the originally assessed standard of performance.

D. All costs incurred in the construction of a plant building, from excavation to completion, should be considered as part of the asset's cost.

Answer (B) is correct.

An asset classified under property, plant, and equipment is measured initially at cost. This amount includes the purchase price and any directly attributable costs of bringing the asset to working condition for its intended use. Directly attributable costs include costs of, for example, site preparation, initial delivery and handling, installation, professional fees (e.g., those of architects and engineers), and dismantling and removing the asset and restoring the site. The purchase price is determined by adding any import fees and nonrefundable purchase taxes and subtracting any trade discounts and rebates.

A . Directly attributable costs of bringing the asset to working condition for its intended use are included in its cost.

C . Subsequent expenditures should be added to the carrying amount if it is probable that they will result in future economic benefits exceeding the originally assessed standard of performance.

D . The costs of a self-constructed asset are determined in the same way as those of an acquired asset. Thus, all costs of construction of a building are included in its initially recorded cost because they are directly attributable costs of bringing the asset to its working condition for its intended use.

Question: 53 An entity sells a piece of machinery, for cash, prior to the end of its estimated useful life. The sale price is less than the carrying amount of the asset on the date of sale. The entry that the entity uses to record the sale is

A.

Cash

Accumulated depreciation -- machinery

Loss on disposal of machinery

Machinery

B.

Cash

Accumulated depreciation -- machinery

Gain on disposal of machinery

Machinery

C.

Cash

Expense -- disposal of machinery

Accumulated depreciation -- machinery

Machinery

D.

Cash

Machinery

Accumulated depreciation -- machinery

Gain on disposal of machinery

Answer (A) is correct.

Cash is debited for the amount of the sale proceeds. Machinery and the related accumulated depreciation are eliminated by a credit and a debit, respectively. Because the sale price was less than the carrying amount of the asset on the date of sale, a loss on disposal should be recognized in net income or loss.

B . A loss on disposal should be recognized in net income.

- C . Accumulated depreciation should be debited.
- D . A loss and accumulated depreciation should be debited.

Question: 54 On January 1, Year 1, an entity purchased an abandoned quarry for US \$1,200,000 to be used as a landfill to service its trash collection contracts with nearby cities for the next 20 years. The entity depletes the quarry using the units-of-production method based on a surveyor's measurements of volume of the quarry's pit. This amount was 500,000 cubic yards when purchased and 350,000 cubic yards at year-end Year 1. What is the net amount that should be shown on the entity's December 31, Year 1, statement of financial position for the quarry?

- A. US \$1,200,000
- B. US \$1,140,000
- C. US \$840,000
- D. US \$360,000

Answer (C) is correct.

The units-of-production method allocates cost based on output. The net amount reported as an asset for the quarry using this method is US \$840,000 $[(350,000 \text{ cubic yards} \div 500,000 \text{ total cubic yards}) \times \$1,200,000]$.

- A . The amount of US \$1,200,000 is the purchase price of the quarry.
- B . The amount of US \$1,140,000 results from using straight-line depletion.
- D . The amount of US \$360,000 equals $\{ \$1,200,000 - [(350,000 \div 500,000) \times \$1,200,000] \}$. The 350,000 cubic yards is the volume remaining in the quarry's pit at year-end Year 1, not the volume depleted.

Question: 55 A new machine has an initial cost of US \$300,000, an estimated useful life of 2,000 hours of use over a 3-year period, and no estimated residual value. Usage rates are estimated as 500 hours in the first year, 700 hours in the second year, and 800 hours in the third year. Depreciation expense in Year 1 under the units-of-production method of depreciation will be

- A. US \$25,000
- B. US \$75,000
- C. US \$100,000
- D. US \$105,000

Answer (B) is correct.

Depreciation expense equals cost minus residual value, times the estimated hours of use in Year 1 divided by the total estimated hours of use. Thus, depreciation expense is US \$75,000 $[(\$300,000 - \$0) \times (500 \text{ hours} \div 2,000 \text{ hours})]$.

- A . The difference between Year 1 depreciation calculated using (1) the units-of-production method and (2) the straight-line method equals US \$25,000.
- C . The amount of US \$100,000 results from using straight-line depreciation.
- D . The depreciation expense for Year 2 is US \$105,000.

Question: 56 A company uses straight-line depreciation for financial reporting purposes, but uses accelerated depreciation for tax purposes. Which of the following account balances would be lower in the financial statements used for tax purposes than it would be in the general purpose financial statements?

- A. Accumulated depreciation.
- B. Cash.
- C. Retained earnings.
- D. Gross property, plant, and equipment.

Answer (C) is correct.

Because an accelerated method is used for tax purposes, depreciation expense and accumulated depreciation will be greater. Moreover, taxable income will be lower than financial net income. Consequently, tax-basis retained earnings will be less than that in the general purpose financial statements.

- A . The balance of accumulated depreciation is higher in the tax-basis financial statements.
- B . Depreciation expense is a noncash charge. The cash balance is unaffected by the depreciation method used.
- D . The historical cost of property, plant, and equipment is recorded in the gross property, plant, and equipment account. This amount is unaffected by depreciation.

Question: 57 What is the journal entry recorded upon the sale of an item of property, plant, and equipment (PPE) that was sold for cash in excess of its carrying amount?

- A. No journal entry is required.
- B. Debit cash

Debit accumulated depreciation

Debit income on disposal of PPE

Credit PPE

C. Debit cash

Debit PPE

Credit accumulated depreciation

Credit income on disposal of PPE

D. Debit cash

Debit accumulated depreciation

Credit PPE

Credit income on disposal of PPE

Answer (D) is correct.

The journal entry to record the sale of an item of PPE for cash in excess of its carrying amount should debit the cash account to record the sale proceeds received. Accumulated depreciation should be eliminated by debiting an amount equal to depreciation accumulated up to the start of the current accounting period plus any depreciation that has accumulated between the start of the current period and the date of disposal. Finally, the PPE account should be credited to eliminate the original cost of the asset. The gain should be recorded as a credit and recognized as income on the income statement.

A . Depreciation must be taken up to the date of disposition, and all amounts relating to the retired asset should be eliminated.

B . The gain should be recorded as a credit.

C . The PPE account should be credited, and accumulated depreciation should be debited.

Question: 58 An entity sold a depreciable asset at the end of the fifth year of its estimated 10-year useful life. The original cost of the asset was US \$100,000, and it was being depreciated on the straight-line basis. If the asset was sold for US \$80,000, the gain on the sale will be

A. US \$20,000

B. US \$25,000

C. US \$30,000

D. US \$50,000

Answer (C) is correct.

The gain on the sale is the difference between the sale proceeds and the carrying amount of the asset (its remaining undepreciated cost). Depreciation must be taken up to the time of sale. Assuming that residual value is US \$0, annual depreciation is US \$10,000 ($\$100,000 \div 10$ years). Thus, the gain is US \$30,000 $\{\$80,000 \text{ sale proceeds} - [\$100,000 \text{ historical cost} - (\$10,000 \times 5 \text{ years})]\}$.

- A . Omitting depreciation for the fifth year results in US \$20,000.
- B . If only 4.5 full years of depreciation are taken, the result is US \$25,000.
- D . Subtracting accumulated depreciation from the original cost results in US \$50,000.

Question: 59 Which of the following is not considered to be an intangible asset?

- A. Goods on consignment.
- B. Patents.
- C. Copyrights.
- D. Trademarks.

Answer (A) is correct.

An intangible asset is an identifiable nonmonetary (nonfinancial) asset without physical substance. Inventory is a tangible asset. Thus, goods on consignment are not intangible assets.

- B . Patents are intangible assets.
- C . Copyrights are intangible assets.
- D . Trademarks are intangible assets.

Question: 60 Which of the following statements is false?

- A. The balance sheet provides information useful for assessing future cash flows, liquidity, and long-term solvency.
- B. Current assets include cash and all other assets expected to become cash or be consumed within one year (or within the operating cycle, whichever is longer).
- C. Investments are classified as current if management intends to liquidate the investment in the near future.
- D. Fixed assets consist of assets that a retail or wholesale company acquires for resale or goods that manufacturers produce for sale.

Answer (D) is correct.

Fixed assets consist of tangible property. They are expected to benefit the entity for more than 1 year and are held for the production or sale of goods or services, rental to others, or administrative purposes.

A . The balance sheet provides information useful for assessing future cash flows, liquidity, and long-term solvency.

B . Current assets include cash and all other assets expected to become cash or be consumed within one year (or within the operating cycle, whichever is longer).

C . Investments are classified as current if management intends to liquidate the investment in the near future.

Question: 61 Which of the following is usually associated with payables classified as accounts payable?

	<u>Periodic Payment of Interest</u>	<u>Secured by Collateral</u>
A.	No	No
B.	No	Yes
C.	Yes	No
D.	Yes	Yes

Answer (A) is correct.

Accounts payable, commonly termed trade accounts payable, are liabilities reflecting the obligations to sellers that are incurred when an entity purchases inventory, supplies, or services on credit. Accounts payable should be recorded at their settlement value. Short-term liabilities, such as accounts payable, do not usually provide for a periodic payment of interest unless the accounts are not settled when due or payable. They also are usually not secured by collateral.

B . Accounts payable are not usually secured by collateral and do not provide for periodic payment of interest.

C . Accounts payable are not usually secured by collateral and do not provide for periodic payment of interest.

D . Accounts payable are not usually secured by collateral and do not provide for periodic payment of interest.

Question: 62 Current liabilities include which of the following items?

- I. Obligations due on demand within 1 year
 - II. Obligations callable at any time by the creditor
 - III. Obligations that will be replaced by other current liabilities
- A. I and II only.
 - B. I and III only.
 - C. II and III only.
 - D. I, II, and III.

Answer (B) is correct.

A current liability is an obligation that will be either liquidated using current assets or replaced by another current liability. Current liabilities also include (1) obligations that, by their terms, are or will be due on demand within 1 year (or the operating cycle if longer), and (2) obligations that are or will be callable by the creditor within 1 year because of a violation of a debt covenant.

A . An obligation callable at any time by the creditor is not a current liability.

C . Obligations callable by the creditor within 1 year as a result of a violation of a debt covenant are current liabilities, but an obligation callable at any time by the creditor is not a current liability.

D . An obligation callable at any time by the creditor is not a current liability.

Question: 63 Buc Co. receives deposits from its customers to protect itself against nonpayments for future services. These deposits should be classified by Buc as

- A. A contract liability.
- B. Revenue.
- C. A deferred credit deducted from accounts receivable.
- D. A contract asset.

Answer (A) is correct.

A customer deposit is a contract liability. It is an obligation to transfer goods or services to a customer for which consideration already has been received from the customer. A contract liability does not qualify for revenue recognition.

B . A revenue is not recognized until it is earned.

C . GAAP ordinarily prohibit offsetting assets and liabilities. Most deferred credits are liabilities.

D . A contract asset is a right to consideration in exchange for goods or services transferred to a customer not conditioned on the passage of time.

Question: 64 How would the proceeds received from the advance sale of nonrefundable tickets for a theatrical performance be reported in the seller's financial statements before the performance?

- A. Revenue for the entire proceeds.
- B. Revenue to the extent of related costs expended.
- C. Unearned revenue to the extent of related costs expended.
- D. Unearned revenue for the entire proceeds.

Answer (D) is correct.

Revenue is recognized when (or as) the entity satisfies a performance obligation by transferring a promised good or service to a customer. The good or service is transferred when the customer obtains control of that good or service. The entire proceeds therefore should be credited to a contract liability (deferred or unearned revenue) because the performance obligation will not be satisfied until the performance has been given even though the tickets are not refundable.

A . Revenue is recognized when (or as) the entity satisfies a performance obligation by transferring a promised good or service to a customer. The good or service is transferred when the customer obtains control of that good or service.

B . Revenue is recognized when (or as) the entity satisfies a performance obligation by transferring a promised good or service to a customer. The good or service is transferred when the customer obtains control of that good or service.

C . The entire proceeds should be credited to unearned revenue.

Question: 65 A retail store received cash and issued a gift certificate that is redeemable in merchandise. When the gift certificate was issued, a

- A. Deferred revenue should be decreased.
- B. Deferred revenue should be increased.
- C. Revenue should be decreased.
- D. Revenue should be increased.

Answer (B) is correct.

Revenue should be recognized when (or as) the entity satisfies a performance obligation by transferring a promised good or service (merchandise) to a customer. The good or service is transferred when the

customer obtains control of that good or service. Consequently, when a gift certificate is issued, the entity receiving cash should record the issuance as a contract liability (deferred or unearned revenue).

A . Deferred revenue should be decreased when the certificate expires or is redeemed, not when it is issued.

C . Revenue is not affected when gift certificates are issued.

D . Revenue is not affected when gift certificates are issued.

Question: 66 A retail store sold gift certificates that are redeemable in merchandise. The gift certificates lapse one year after they are issued. How would the deferred revenue account be affected by each of the following?

	<u>Redemption of Certificates</u>	<u>Lapse of Certificates</u>
A.	Decrease	Decrease
B.	Decrease	No effect
C.	No effect	Decrease
D.	No effect	No effect

Answer (A) is correct.

When the gift certificates are sold, the retail store records deferred revenue (a contract liability). When the certificates are redeemed or lapse, the store reclassifies deferred revenue as revenue because no performance obligation remains to be satisfied. Thus, the redemption and lapse of certificates decrease deferred revenue.

B . The lapse of certificates affects deferred revenue.

C . The redemption of certificates affects deferred revenue.

D . The redemption and lapse of certificates affect deferred revenue.

Question: 67 Which of the following statements is correct regarding deferred revenues recorded by a company that provides services to customers?

A. Deferred revenue is a liability until the service has been performed.

- B. Deferred revenues represent revenues recognized but not yet received in cash.
- C. Deferred revenues result from services that have been performed but have not been billed.
- D. A deferred revenue on the books of one company is an accrued expense on the books of another company.

Answer (A) is correct.

A deposit or other advance (a deferred revenue) is a contract liability. It does not qualify for revenue recognition until the performance obligation is satisfied by transfer of the promised good or service to a customer.

- B . Accrued revenues, not deferred revenues, represent revenues recognized but not yet received in cash.
- C . Accrued revenues, not deferred revenues, result from services that have been performed but have not yet been billed.
- D . A deferred revenue on the books of one company is a prepaid expense on the books of another company, not an accrued expense.

Question: 68 An automobile dealer sells service contracts. The contracts stipulate that the dealer will perform specific repairs on covered vehicles. The contracts vary in length from 12 to 36 months. Do the following increase when service contracts are sold?

	<u>Deferred Revenue</u>	<u>Service Revenue</u>
A.	Yes	Yes
B.	No	No
C.	No	Yes
D.	Yes	No

Answer (D) is correct.

Revenue is recognized when (or as) the entity satisfies a performance obligation by transferring a promised good or service to a customer. Thus, revenue is not recognized until the agreed services have been provided or the contracts expire. Consequently, deferred revenue (as contract liability) is credited (increased) at the date of sale of a service contract, but revenue is not.

- A . Service revenue is not increased, but deferred revenue is credited.
- B . Service revenue is not increased, but deferred revenue is credited.
- C . Service revenue is not increased, but deferred revenue is credited.

Question: 69 Long-term obligations that are or will become callable by the creditor because of the debtor's violation of a provision of the debt agreement at the balance sheet date should be classified as

- A. Long-term liabilities.
- B. Current liabilities unless the creditor has waived the right to demand repayment for more than 1 year from the balance sheet date.
- C. Contingent liabilities until the violation is corrected.
- D. Current liabilities unless it is reasonably possible that the violation will be corrected within the grace period.

Answer (B) is correct.

A current liability is an obligation that will be either liquidated using a current asset or replaced by another current liability. Current liabilities also include (1) obligations that by their terms are or will be due on demand within 1 year (or the operating cycle, if longer), and (2) obligations that are or will be callable by the creditor within 1 year because of a violation of a debt covenant. An exception exists, however, if the creditor has waived or subsequently lost the right to demand repayment for more than 1 year (or the operating cycle, if longer) from the balance sheet date.

- A . This kind of obligation should be classified as a current liability.
- C . The liability is definite, not contingent.
- D . The obligation may be classified as noncurrent if it is probable that the violation will be corrected within the grace period.

Question: 70 A cable television entity receives deposits from customers that are refunded when service is terminated. The average customer stays with the entity 8 years. How should these deposits be shown on the financial statements?

- A. Operating revenue.
- B. Other revenue.
- C. Paid-in capital.
- D. Liability.

Answer (D) is correct.

Liabilities are present obligations arising from past events, the settlement of which is expected to result in an outflow of resources embodying economic benefits. Customers' deposits must be returned or credited to their accounts. The deposits should therefore be recorded as liabilities.

Deposits meet the definition of liabilities, not revenue. Revenue is income that arises in the ordinary activities of the entity. Income is an increase in economic benefits in the form of inflows or enhancements of assets or decreases of liabilities that result in an increase in equity (excluding transactions with owners).

A . Deposits meet the definition of liabilities, not revenue. Revenue is income that arises in the ordinary activities of the entity. Income is an increase in economic benefits in the form of inflows or enhancements of assets or decreases of liabilities that result in an increase in equity (excluding transactions with owners).

B . Deposits meet the definition of liabilities, not revenue. Revenue is income that arises in the ordinary activities of the entity. Income is an increase in economic benefits in the form of inflows or enhancements of assets or decreases of liabilities that result in an increase in equity (excluding transactions with owners).

C . Deposits are liabilities, not equity items. The equity of an entity is the residual interest in the assets of an entity that remains after subtracting its liabilities.

Question: 71 The relationship between the present value of a future sum and the future value of a present sum can be expressed in terms of their respective interest factors. If the present value of US \$200,000 due at the end of 8 years, at 10%, is US \$93,300, what is the approximate future value of US \$200,000 invested for the same length of time and at the same rate?

- A. US \$93,300
- B. US \$200,000
- C. US \$293,300
- D. US \$428,724

Answer (D) is correct.

The interest factor for the future value of a present sum is equal to the reciprocal of the interest factor for the present value of a future sum. Thus, the future value is US \$428,724 $[(\$200,000 \div \$93,300) \times \$200,000]$.

- A . The amount of US \$93,300 is the present value of US \$200,000 to be received in 8 years.
- B . The amount of US \$200,000 is the present value, not the future value, of US \$200,000 invested today.
- C . The addition of the present and future values has no accounting meaning.

Question: 72 Risoner Company plans to purchase a machine with the following conditions:

- Purchase price = US \$300,000.
- The down payment = 10% of purchase price with remainder financed at an annual interest rate of 16%.
- The financing period is 8 years with equal annual payments made every year.
- The present value of an ordinary annuity of US \$1 per year for 8 years at 16% is 4.3436.

The annual payment (rounded) is

- A. US \$39,150
- B. US \$43,200
- C. US \$62,160
- D. US \$69,067

Answer (C) is correct.

The periodic payment equals the amount to be accumulated (US \$300,000 price – \$30,000 down payment = US \$270,000) divided by the interest factor for the present value of an ordinary annuity for 8 years at 16%. Consequently, the payment is US \$62,160 ($\$270,000 \div 4.3436$).

A . The amount of US \$39,150 is based on dividing ($\$270,000 \times 1.16$) by 8 years.

B . The amount of US \$43,200 is 16% of US \$270,000.

D . The amount of US \$69,067 reflects division of the entire purchase price by the present value of an annuity (4.3436).

Question: 73 Assume that the interest rate is greater than zero. Which of the following cash-inflow streams should you prefer?

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>
A.	US \$400	US \$300	US \$200	US \$100
B.	US \$100	US \$200	US \$300	US \$400
C.	US \$250	US \$250	US \$250	US \$250
D.	Any of these, since they each sum to US \$1,000.			

Answer (A) is correct.

The concept of present value gives greater value to inflows received earlier in the stream. Thus, the declining inflows would be superior to increasing inflows, or even inflows.

B . The cash flow shown does not produce the greatest present value.

C . The cash flow shown does not produce the greatest present value.

D . Present value of the cash flows must be considered.

Question: 74 The present value may be calculated for discounted cash

	<u>Inflows</u>	<u>Outflows</u>	<u>Annuities</u>
A.	Yes	Yes	Yes
B.	Yes	No	Yes
C.	No	Yes	No
D.	No	No	Yes

Answer (A) is correct.

The present value concept may be applied both to dollars-in (inflows) and to dollars-out (outflows). Thus, individual cash inflows and cash outflows or a series thereof (an annuity) may be discounted to time zero (the present). Net present value is the sum of discounted cash inflows minus any discounted cash outflows. Net present value may be either positive or negative.

B . A present value may be calculated for discounted cash outflows.

C . A present value may be calculated for discounted cash inflows or a series thereof (an annuity).

D . A present value may be calculated for discounted cash inflows or outflows.

Question: 75 On September 1, Year 1, an entity purchased a new machine that it does not have to pay for until September 1, Year 3. The total payment on September 1, Year 3, will include both principal and interest. Assuming interest at a 10% rate, the cost of the machine will be the total payment multiplied by what time value of money factor?

A. Present value of annuity of US \$1.

B. Present value of US \$1.

C. Future amount of annuity of US \$1.

D. Future amount of US \$1.

Answer (B) is correct.

The cost of the machine on 9/1/Year 1 is the present value of the payment to be made on 9/1/Year 3. To obtain the present value, i.e., today's price, the future payment is multiplied by the present value of US \$1 for two periods at 10%.

A . The present value of an annuity is the value today of a series of future payments, not merely one payment.

C . The future value of an annuity is the amount available at a specified time in the future after a series of deposits (investments).

D . The future value of a dollar is the amount that will be available at a specified time in the future based on a single investment (deposit) today.

Question: 76 On July 1, Goblette Company sold some machinery to another company. The two companies entered into an installment sales contract at a predetermined interest rate. The contract required 5 equal annual payments with the first payment due on July 1, the date of sale. What present value concept is appropriate for this situation?

A. Present value of an annuity due of US \$1 for 5 periods.

B. Present value of an ordinary annuity of US \$1 for 5 periods.

- C. Future amount of an annuity due of US \$1 for 5 periods.
- D. Future amount of US \$1 for 5 periods.

Answer (A) is correct.

The contract calls for 5 equal annual payments with the first due immediately. Ordinary annuity tables assume the first payment occurs at the end of the first time period. An annuity in which the first payment occurs at the beginning of the first period is called an “annuity due” or an “annuity in advance.” The number of payments earning interest in an annuity due is one less than the number earning interest in an ordinary annuity because there is no interest on the first payment. Accordingly, the present value of an annuity due of US \$1 for 5 periods can be calculated by taking the present value of an ordinary annuity of US \$1 for 4 periods and adding US \$1. Hence, either a special table for an annuity due or the method described above can be used in this situation.

- B . The question describes an annuity due (not an ordinary annuity) for 5 periods.
- C . Although the question involves an annuity due, the present value, not the future amount, is required.
- D . The present value of an annuity due, not the future amount of a single sum, will provide the correct answer.

Question: 77 Harry Rawlings wants to withdraw US \$10,000 (including principal) from an investment fund at the end of each year for 5 years. How should he compute his required initial investment at the beginning of the first year if the fund earns 6% compounded annually?

- A. US \$10,000 times the amount of an annuity of US \$1 at 6% at the end of each year for 5 years.
- B. US \$10,000 divided by the amount of an annuity of US \$1 at 6% at the end of each year for 5 years.
- C. US \$10,000 times the present value of an annuity of US \$1 at 6% at the end of each year for 5 years.
- D. US \$10,000 divided by the present value of an annuity of US \$1 at 6% at the end of each year for 5 years.

Answer (C) is correct.

The question requires a present value rather than a future value, i.e., today’s equivalent of US \$10,000 at the end of each of the next 5 years. The table used is for the present value of an ordinary annuity. The interest factor corresponding to 6% for 5 periods is multiplied by US \$10,000 to provide the answer.

- A . The question requires a present value rather than a future value calculation. “Amount of an annuity” is synonymous with future value of an annuity.

B . A present value computation is required. Moreover, the payment should be multiplied by the relevant interest factor.

D . The amount of US \$10,000 must be multiplied (rather than divided) by the present value of an ordinary annuity of US \$1 for 6% and 5 periods.

Question: 78 On January 1, an entity issued a 10-year US \$500,000 bond at 96% of its face amount. The bond bears interest at 12%, payable on January 1 and July 1. The entry to record the issuance of the bond on January 1 is

A.	Cash	US \$480,000	
	Bonds payable		US \$480,000
B.	Cash	US \$500,000	
	Bonds payable		US \$500,000
C.	Cash	US \$480,000	
	Discount on bonds payable	20,000	
	Bonds payable		US \$500,000
D.	Cash	US \$500,000	
	Premium on bonds payable		US \$ 20,000
	Bonds payable		480,000

Answer (C) is correct.

The entity received US \$480,000 cash on the issuance of the bond. Its face amount is US \$500,000, the amount to be paid at maturity. Thus, the credit to bonds payable is US \$500,000. The US \$20,000 difference is recorded as a discount on bonds payable (a debit) and is amortized over the life of the issue.

A . The entry to bonds payable is based on the face, or maturity, amount of the bond issued. The difference between the amount received on issuance and the face amount is recorded as a premium or discount on bonds payable.

B . The discount should be recognized.

D . The debit to cash is US \$480,000, a US \$20,000 discount should be debited, and the credit to bonds payable is US \$500,000.

Question: 79 The effective-interest method and the straight-line method of amortizing a bond discount differ in that the effective-interest method results in

- A. Higher total interest expense over the term of the bonds.
- B. Escalating annual interest expense over the term of the bonds.
- C. Shrinking annual interest expense over the term of the bonds.
- D. Constant annual interest expense over the term of the bonds.

Answer (B) is correct.

Under the effective-interest method, interest expense for each period equals the effective interest rate times the carrying amount of the bond issue. As the discount is amortized, the carrying value rises and interest expense increases.

- A . The two methods of amortization result in the same total interest expense over the term of the bonds.
- C . Annual interest expense would decrease if a premium were being amortized
- D . The straight-line method results in constant annual interest expense.

Question: 80 If bonds are initially sold at a discount and the effective-interest method of amortization is used, interest expense

- A. In the earlier periods will be less than interest expense in the later periods.
- B. In the earlier periods will be greater than interest expense in the later periods.
- C. Will equal the cash interest payment each period.
- D. Will be less than the cash interest payment each period.

Answer (A) is correct.

Interest expense equals the carrying amount of the liability at the beginning of the period times the effective interest rate. The carrying amount of the liability equals the face amount of the bond minus the discount. As the discount is amortized over the life of the bond, the carrying amount increases. Consequently, the interest expense increases over the term of the bond.

- B . Interest expense will increase over the term of the bonds.
- C . Interest expense exceeds the cash interest payment when bonds are issued at a discount. The reason is that the effective rate is higher than the nominal rate. The excess of interest expense over the cash payment is the amount of discount amortized each period.
- D . Interest expense exceeds the cash interest payment when bonds are issued at a discount. The reason is that the effective rate is higher than the nominal rate. The excess of interest expense over the cash payment is the amount of discount amortized each period.

Question: 81 An entity issues bonds payable at a premium. You are analyzing the effects of using the effective interest rate (constant yield) method in accounting for the bonds over their 10-year life. Which of the following trends related to the reported amounts for (1) interest expense and (2) carrying amount of the bonds would you expect to find?

	<u>Interest Expense</u>	<u>Carrying Amount</u>
A.	Constant amount	Constant amount
B.	Increasing amount	Decreasing amount
C.	Decreasing amount	Decreasing amount
D.	Decreasing amount	Constant amount

Answer (C) is correct.

When the effective interest rate method is used, interest expense equals the effective rate (a constant rate) times the carrying amount at the beginning of the period. The carrying amount is the par value plus the balance of the unamortized premium. The difference between interest expense and the nominal interest is the premium amortization for the period. Thus, interest expense is a decreasing amount each period because a constant rate is applied to a decreasing carrying amount.

A . The interest expense is a decreasing amount each period. It is computed by applying a constant rate to a decreasing carrying amount.

B . The interest expense is a decreasing amount each period. It is computed by applying a constant rate to a decreasing carrying amount.

D . The interest expense is a decreasing amount each period. It is computed by applying a constant rate to a decreasing carrying amount.

Question: 82 Kale Co. purchased bonds at a discount on the open market as an investment and has the intent and ability to hold these bonds to maturity. Absent an election of the fair value option, Kale should account for these bonds at

- A. Cost.
- B. Amortized cost.
- C. Fair value.

D. Lower of cost or market.

Answer (B) is correct.

Without an election of the fair value option, investments in debt securities that the investor has the ability and positive intent to hold until maturity must be classified as held-to-maturity and measured at amortized cost.

A . The discount is amortized over the term of the bonds.

C . Trading and available-for-sale debt securities are accounted for at fair value.

D . LIFO or retail inventory is measured at lower of cost or market.

Question: 83 A reclassification of available-for-sale debt securities to the held-to-maturity category results in

A. The amortization of an unrealized gain or loss existing at the transfer date.

B. The recognition in earnings on the transfer date of an unrealized gain or loss.

C. The reversal of any unrealized gain or loss previously recognized in earnings.

D. The reversal of any unrealized gain or loss previously recognized in other comprehensive income.

Answer (A) is correct.

The unrealized holding gain or loss on the date of transfer for available-for-sale debt securities transferred to the held-to-maturity category continues to be reported in OCI. However, it is amortized as an adjustment of yield in the same manner as the amortization of any discount or premium. This amortization offsets or mitigates the effect on interest income of the amortization of the premium or discount. Fair value accounting may result in a premium or discount when a debt security is transferred to the held-to-maturity category.

B . Only transfers to the trading debt securities category result in immediate recognition in earnings of an unrealized gain or loss.

C . No reversals are required by reclassification.

D .The reclassification does not require reversal of any previously recognized amounts.

Question: 84 When the fair value of an investment in debt securities exceeds its amortized cost, how should each of the following debt securities be reported at the end of the year, given no election of the fair value option?

Debt Securities Classified As	
<u>Held-to-Maturity</u>	<u>Available-for-Sale</u>
A. Amortized cost	Amortized cost
B. Amortized cost	Fair value
C. Fair value	Fair value
D. Fair value	Amortized cost

Answer (B) is correct.

Investments in debt securities must be classified as held-to-maturity and measured at amortized cost in the balance sheet if the reporting entity has the positive intent and ability to hold them to maturity. Debt securities that are not expected to be sold in the near term and that are not held-to-maturity should be classified as available-for-sale. Available-for-sale debt securities should be reported at fair value, with unrealized holding gains and losses (except those on securities designated as being hedged in a fair value hedge) excluded from net income and reported in OCI.

A . Debt securities classified as held-to-maturity and available-for-sale are reported at amortized cost and fair value, respectively.

C . Debt securities classified as held-to-maturity and available-for-sale are reported at amortized cost and fair value, respectively.

D . Debt securities classified as held-to-maturity and available-for-sale are reported at amortized cost and fair value, respectively.

Question: 85 An available-for-sale debt security was purchased on September 1, Year 4, between interest dates. The next interest payment date was February 1, Year 5. Because of a permanent decline in fair value, the cost of the debt security substantially exceeded its fair value at December 31, Year 4. On the balance sheet at December 31, Year 4, the debt security should be carried at

A. Fair value plus the accrued interest paid.

B. Fair value.

C. Cost plus the accrued interest paid.

D. Cost.

Answer (B) is correct.

As a result of a permanent decline in fair value, the security should be written down to fair value, and the loss should be treated as a realized loss. Accordingly, the loss is recognized in net income, and the new cost basis is not adjusted for increases in the fair value of the security. Interest paid is not added to the fair value because it is part of the cost.

- A . Interest paid is part of the cost.
- C . The investment should be written down to reflect the permanent impairment of value.
- D . The investment should be written down to reflect the permanent impairment of value.

Question: 86 The amount by which the fair value of a debt security exceeds its cost should be accounted for in the financial statements when the security is classified as

	<u>Trading</u>	<u>Available-for-Sale</u>
A.	No	No
B.	No	Yes
C.	Yes	Yes
D.	Yes	No

Answer (C) is correct.

Unrealized holding gains and losses on trading debt securities must be recognized in earnings. Unrealized holding gains and losses on available-for-sale debt securities are recognized in other comprehensive income.

- A . Unrealized holding gains and losses on both classes of debt securities must be recognized.
- B . Unrealized holding gains and losses on both classes of debt securities must be recognized.
- D . Unrealized holding gains and losses on both classes of debt securities must be recognized.

Question: 87 Entity A reported a defined benefit pension asset of US \$15,000 because

- A. The fair value of plan assets at the reporting date was US \$15,000.
- B. The PBO at the reporting date was greater than the fair value of plan assets by US \$15,000.
- C. The unfunded PBO at the reporting date was US \$15,000.
- D. The excess of the fair value of plan assets over the PBO on the reporting date was US \$15,000.

Answer (D) is correct.

At the end of each reporting period, an entity should measure the PBO and the fair value of plan assets. A pension asset is recognized in the balance sheet when the PBO is overfunded, i.e., when the fair value of plan assets exceeds the PBO.

- A . A pension asset is the excess of the fair value of plan assets over the PBO.
- B . A pension liability is recognized when the PBO is greater than the fair value of plan assets.
- C . An unfunded PBO results in recognition of a pension liability.

Question: 88 Which of the following risks, if any, does an employer bear in relation to the defined benefit pension plan provided to employees?

	<u>Actuarial Risk</u>	<u>Investment Risk</u>
A.	No	Yes
B.	Yes	No
C.	No	No
D.	Yes	Yes

Answer (D) is correct.

A defined benefit pension plan defines an amount of pension benefit that the employee will receive at some time in the future. The employer is responsible for providing the agreed benefits and therefore bears both actuarial risk and investment risk.

- A . Under the defined benefit plan, in addition to the investment risk, an employer also bears the actuarial risk.

- B . Under the defined benefit plan, an employer bears both the investment risk and the actuarial risk.
- C . Under the defined contribution plan, not the benefit plan, an employer neither bears actuarial risk nor investment risk.

Question: 89 Under a defined contribution pension plan, an employer is obligated to make an annual deposit of US \$50,000 to the employee pension plan for services rendered by them each year. In Year 1, the employer deposited US \$70,000 in the employee pension plan. What amount of pension expense did the employer recognize in Year 1?

- A. US \$70,000
- B. US \$50,000
- C. US \$20,000
- D. US \$120,000

Answer (B) is correct.

Under the defined contribution pension plan, the employer’s annual pension expense is the amount of the contribution defined by the plan’s formula (US \$50,000). The entry is

Prepaid expenses	US \$20,000	
Pension expense	50,000	
Cash		US \$70,000

- A . The amount of US \$70,000 is the deposit in Year 1. It is greater than the contribution defined by the plan’s formula.
- C . The amount of US \$20,000 is the asset (prepaid expenses) reported for the difference between the amount deposited and the amount defined by the plan’s formula.
- D . The amount of US \$120,000 is the sum of the pension expense recognized and the cash deposited.

Question: 90 On December 31, Year 1, Entity A determines the following information in relation to its defined benefit pension plan:

Fair value of plan assets	US \$210,000
Projected benefit obligation (PBO)	US \$260,000

In its Year 1 financial statements, Entity A reports a pension <List A> of <List B> for the <List C> PBO.

	<u>List A</u>	<u>List B</u>	<u>List C</u>
A.	Liability	US \$50,000	Unfunded
B.	Asset	US \$210,000	Overfunded
C.	Liability	US \$260,000	Unfunded
D.	Liability	US \$50,000	Overfunded

Answer (A) is correct.

Entity A recognizes a pension liability to the extent its PBO is unfunded. This excess of the PBO over the fair value of the plan assets is US \$50,000 ($\$260,000 - \$210,000$).

B . A pension asset is recognized if the fair value of plan assets is greater than the PBO.

C . The amount of US \$260,000 is the PBO, not the unfunded amount of the PBO.

D . An overfunded PBO results in recognition of a pension asset.

Question: 91 Which of the following statements is true for a defined contribution pension plan?

A. The employer is required to contribute a certain amount each period based on the plan's formula.

B. The employer bears the risk of the plan's investment performance.

C. Retirement benefits received by employees are defined by the plan's formula.

D. The employer and employees are required to contribute equal amounts to the pension fund.

Answer (A) is correct.

Under a defined contribution plan, the employer's only obligation is to periodically deposit a certain amount in the pension fund.

B . The employees bear the risk of the plan's investment performance.

C . The benefits received by employees are defined by the plan's formula under a defined benefit plan, not a defined contribution plan.

D . Equal contributions are not required for a defined contribution plan.

Question: 92 Mercer, Inc., maintains a defined benefit pension plan for its employees. As of December 31, the fair value of the plan assets is less than the accumulated benefit obligation and less than the projected benefit obligation. The PBO exceeds the ABO. In its balance sheet as of December 31, Mercer should report a liability for pension benefits in the amount of the

- A. Excess of the ABO over the fair value of the plan assets.
- B. Excess of the PBO over the fair value of the plan assets.
- C. PBO.
- D. ABO.

Answer (B) is correct.

An employer that sponsors a defined benefit pension plan must recognize the funded status of the plan in its balance sheet. A pension liability must be recognized for any excess of the PBO over the fair value of the plan assets at the balance sheet date.

- A . The liability for pension benefits is equal to the excess of the PBO over the fair value of the plan assets.
- C . The liability for pension benefits is equal to the excess of the PBO over the fair value of the plan assets.
- D . The liability for pension benefits is equal to the excess of the PBO over the fair value of the plan assets.

Question: 93 If a lease agreement transfers substantially all of the benefits and risks of ownership of the asset to the lessee, the asset value is recognized on the lessee's books as a(n) <List A> asset, and the lease is classified as a(n) <List B> lease.

	<u>List A</u>	<u>List B</u>
A.	Tangible	Capital
B.	Intangible	Capital
C.	Tangible	Operating
D.	Intangible	Operating

Answer (A) is correct.

When a lease transfers substantially all of the benefits and risks of ownership to the lessee, it is capitalized because the transaction is in essence an installment purchase. Accordingly, the lessee records a depreciable asset and a liability.

B . The recorded asset is a tangible asset.

C . If a lease transfers substantially all of the benefits and risks of ownership, it is capitalized.

D . If a lease transfers substantially all of the benefits and risks of ownership, it is capitalized. Furthermore, the recorded asset is a tangible asset.

Question: 94 Capital and operating leases differ in that the lessor

A. Obtains use of the asset only under a capital lease.

B. Is using the lease as a source of financing only under an operating lease.

C. Makes rent payments that are actually installment payments constituting a payment of both principal and interest only under a capital lease.

D. Finances the transaction through the leased asset only under a capital lease.

Answer (D) is correct.

A lease is either a rental or an installment purchase arrangement between a lessor (the owner or seller of the property) and a lessee (the renter or purchaser). The issue in all leases is whether substantially all of the benefits and risks of ownership have been transferred from the lessor to the lessee. If so, the lease should be capitalized because it is a purchase-and-financing arrangement. If they have not transferred, the lease is a rental arrangement (an operating lease).

A . The lessor transfers use of the asset under both types of leases to the lessee. The lessor does not obtain use of the asset.

B . The lessee uses the lease as a source of financing under a capital lease, not an operating lease. The lessor is the source of financing because it extends credit to the lessee.

C . The lessee makes payments to the lessor under both types of leases. The lessor does not make payments.

Question: 95 Which of the following statements about a capital lease is false?

A. The lessor capitalizes the net investment in the lease.

B. The lessor records the leased item as an asset.

C. The lessee records depreciation or capital cost allowance on the leased asset.

D. The lease arrangement represents a form of financing.

Answer (B) is correct.

When a lease is capitalized, the lessor derecognizes the leased item and records lease payments receivable. The lessee records and depreciates the leased item.

A . If a lease is capitalized, the lessor recognizes a net receivable equal to the net investment in the lease: gross investment (minimum lease payments from the lessor's perspective plus unguaranteed residual value) discounted at the interest rate implicit in the lease.

C . The lessee records depreciation on the leased asset under a capitalized lease. This process is separate from the accounting for the lease obligation.

D . A capitalized lease is, in essence, a purchase-and-financing arrangement.

Question: 96 Because of a defect discovered in its seat belts in December Year 1, an automobile manufacturer believes it is probable that it will be required to recall its products. The final decision on the recall is expected to be made in March Year 2 and is estimated to be US \$2.5 million. How should this information be reported in the December 31, Year 1, financial statements?

A. As a loss of US \$2.5 million and a liability of US \$2.5 million.

B. As a prior-period adjustment of US \$2.5 million.

C. As an appropriation of retained earnings of US \$2.5 million.

D. It should not be disclosed because it has not yet happened.

Answer (A) is correct.

Because the contingent loss is probable and presumably can be reasonably estimated, the entity must recognize a loss and a liability for US \$2.5 million.

B . A prior period adjustment is used to account for errors, not loss contingencies.

C . The entity must recognize a loss and a liability.

D . If the loss is probable and can be reasonably (reliably) estimated, it should be recognized by a debit to income.

Question: 97 Which one of the following loss contingencies will usually be accounted for by accruing the liability?

A. General or unspecified business risks.

B. Risk of loss from catastrophes that might occur to a manufacturer.

C. Risk of loss or damage of enterprise property caused by fire, explosion, or other hazards.

D. Premiums offered to customers.

Answer (D) is correct.

When premiums are offered to customers, for example, upon redemption of coupons, the entity can usually establish that an outflow of economic benefits is probable. Furthermore, if the entity has prior experience with such offers or information about the experience of similar entities, a reasonable estimate of the obligation should be feasible.

A . No accrual is permitted for general or unspecified business risks, for example, those related to national and international economic conditions. No disclosure is required.

B . The loss must be probable.

C . An existing condition, situation, or set of circumstances involving uncertainty must exist.

Question: 98 Which of the following is not a factor, with respect to pending or threatened litigation, that must be considered in determining whether a liability should be recognized?

A. The time period in which the underlying cause for action occurred.

B. The probability of an unfavorable outcome.

C. The ability to make a reasonable estimate of the amount of loss.

D. The number of parties involved in the litigation.

Answer (D) is correct.

The number of parties involved in the litigation is irrelevant. For example, the same accounting treatment is applied whether a claim is brought by an individual or in a class action suit.

A . If the underlying cause for action arose after the date of the financial statements, a liability may not be recognized in those statements.

B . A liability is not recognized unless it is probable that a loss occurred.

C . A liability is not recognized unless the amount can be reasonably estimated.

Question: 99 A contingent asset is

A. Recognized when condemnation awards are probable or can be reliably estimated.

B. Recognized when damages to be awarded in a copyright infringement suit are highly probable.

C. Recognized when disclosure in the notes to financial statements only could be misleading.

D. Not recognized under any circumstances.

Answer (D) is correct.

A contingent asset is a possible asset arising from past events and the existence of which will be confirmed only by uncertain future events not wholly within the entity's control. An example is a potential recovery on a legal claim with an uncertain outcome. A contingent asset is not recognized but should be disclosed if an inflow of economic benefits is probable. Disclosures include a description of the contingent asset and an estimate of its financial effects. A contingent asset is not recognized because the income may not be realized. However, if realization is virtually certain, the asset is not contingent and may be recognized.

A . Contingent assets are not recognized.

B . Contingent assets are not recognized.

C . Contingent assets are not recognized. If disclosure would be misleading, the disclosure should not be made.

Question: 100 In order to be considered a capital lease, the lessor must transfer substantially all of the benefits and risks of ownership to the lessee. This can be shown by all of the following except

A. The present value of the minimum lease payments being at least 75% of the fair value of the leased property.

B. The lease term being 75% or more of the estimated economic life of the leased property.

C. The lease providing for the transfer of ownership of the leased property.

D. The lease containing a bargain purchase option.

Answer (A) is correct.

The present value of the minimum lease payments must be at least 90%, not 75%, of the fair value of the leased property for the lease to be considered as transferring substantially all of the benefits and risks of ownership to the lessee.

B . If the lease term is 75% or more of the estimated economic life of the leased property, the lease is generally considered to transfer substantially all of the benefits and risks of ownership to the lessee.

C . If the lease provides for the transfer of ownership of the leased property, it is generally considered to transfer substantially all of the benefits and risks of ownership to the lessee.

D . If a lease contains a bargain purchase option, it is generally considered to transfer substantially all of the benefits and risks of ownership to the lessee.

PART 3 UNIT 10

1.The risk that securities cannot be sold at a reasonable price on short notice is called

- A.Default risk.
- B.Interest-rate risk.
- C.Purchasing-power risk.
- D.Liquidity risk.

Answer (D) is correct.

An asset is liquid if it can be converted to cash on short notice. Liquidity (marketability) risk is the risk that assets cannot be sold at a reasonable price on short notice. If an asset is not liquid, investors will require a higher return than for a liquid asset. The difference is the liquidity premium.

- A.Default risk is the risk that a borrower will not pay the interest or principal on a loan.
- B.Interest-rate risk is the risk to which investors are exposed because of changing interest rates.
- C.Purchasing-power risk is the risk that inflation will reduce the purchasing power of a given sum of money.

2.The risk of loss because of fluctuations in the relative value of foreign currencies is called

- A.Expropriation risk.
- B.Multinational beta.
- C.Exchange rate risk.
- D.Undiversifiable risk.

Answer (C) is correct.

When amounts to be paid or received are denominated in a foreign currency, exchange rate fluctuations may result in exchange gains or losses. For example, if a U.S. firm has a receivable fixed in terms of units of a foreign currency, a decline in the value of that currency relative to the U.S. dollar results in a foreign exchange loss.

A.Expropriation risk is the risk that the sovereign country in which the assets backing an investment are located will seize the assets without adequate compensation.

B.The beta value in the capital asset pricing model for a multinational firm is the systematic risk of a given multinational firm relative to that of the market as a whole.

D.The beta value in the capital asset pricing model for a multinational firm is the systematic risk of a given multinational firm relative to that of the market as a whole. It is an undiversifiable risk.

3.A measure that describes the risk of an investment project relative to other investments in general is the

A.Coefficient of variation.

B.Beta coefficient.

C.Standard deviation.

D.Expected return.

Answer (B) is correct.

The required rate of return on equity capital in the capital asset pricing model is the risk-free rate, plus the product of the market risk premium times the beta coefficient. The market risk premium is the amount above the risk-free rate that will induce investment in the market. The beta coefficient of an individual share is the correlation between the volatility (price variation) of the equities market and that of the price of the individual share. For example, if an individual share goes up 15% and the market only 10%, beta is 1.5.

A.The coefficient of variation compares risk with expected return (standard deviation ÷ expected return).

C.Standard deviation measures dispersion (risk) of project returns.

D.Expected return does not describe risk.

4.The difference between the required rate of return on a given risky investment and that of a risk-free investment with the same expected return is the

A.Risk premium.

B.Coefficient of variation.

C.Standard error of measurement.

D.Beta coefficient.

Answer (A) is correct.

The market risk premium is the amount above the risk-free rate required to include average investors to enter the market. The risk premium is the portion of expected return attributed to the increased risk.

B. The coefficient of variation represents the standard deviation of an investment's returns divided by the mean returns.

C. The standard error represents a measure of variability in the investment's returns.

D. The beta coefficient represents the sensitivity of the investment's returns to the market returns.

5. Residual income is often preferred over return on investment (ROI) as a performance evaluation because

A. Residual income is a measure over time while ROI represents the results for a single time period.

B. Residual income concentrates on maximizing absolute amounts of income rather than a percentage return as with ROI.

C. The imputed interest rate used in calculating residual income is more easily derived than the target rate that is compared to the calculated ROI.

D. Average investment is employed with residual income while year-end investment is employed with ROI.

Answer (B) is correct.

Residual income concentrates on earnings in excess of the minimum desired return. With ROI, a segment may reject a project that exceeds the minimum return if the project will decrease the segment's overall ROI. For example, a project that earns an ROI of 22%, which is greater than the target rate of 20%, might be rejected if the segment is currently earning 25%, because the project will decrease the segment's ROI. This would not occur if performance was measured using residual income.

A. Both measures represent the results for a single time period.

C. The target rate for ROI is the same as the imputed interest rate used in the residual income calculation.

D. Average investment should be employed in both methods. At any rate, the investment base employed for both methods would be the same.

6.A firm is considering expanding its international operations. Which one of the following conditions should the firm's controller classify as political risk?

- A.Expropriation of the plant after construction.
- B.Declining home-country currency values.
- C.Accelerating inflation of the host country.
- D.Different accounting methods between home and host countries.

Answer (A) is correct.

Political risk is the probability of loss from actions of governments, such as from changes in tax laws or environmental regulations or from expropriation of assets.

B.This is an exchange-rate risk rather than a political risk.

C.A political risk is specific to a risk arising from possible expropriation (or other restrictions), with net losses to the parent company. Thus, accelerating inflation of the host country is not classified as a political risk.

D.A political risk is specific to a risk arising from possible expropriation (or other restrictions), with net losses to the parent company. Thus, having different accounting methods between home and host countries is not classified as political risk.

7.One type of risk to which investment securities are subject can be offset through portfolio diversification. This type of risk is referred to as

- A.Market risk.
- B.Undiversifiable risk.
- C.Liquidity risk.
- D.Unsystematic risk.

Answer (D) is correct.

Unsystematic risk is the risk inherent in a particular investment security. Since individual securities are affected by the particular strengths and weaknesses of the issuer, this risk can be offset through portfolio diversification.

A. Systematic risk, also called market or undiversifiable risk, is the risk faced by all firms. Since all investment securities are affected, this risk cannot be offset through portfolio diversification.

B. Undiversifiable risk is another name for market risk.

C. Liquidity risk is the risk that a security cannot be sold on short notice for its market value.

8. Prior to the introduction of the euro, a U.S. corporation was in possession of accounts receivable denominated in Deutsche marks. To what type of risk was the corporation exposed?

A. Liquidity risk.

B. Business risk.

C. Exchange-rate risk.

D. Price risk.

Answer (C) is correct.

Exchange-rate risk is the risk that a foreign currency transaction will be negatively exposed to fluctuations in exchange rates. Because the U.S. corporation sells goods to German customers and records accounts receivable denominated in Deutsche marks, the corporation is exposed to exchange-rate risk.

A. Liquidity risk is the possibility that an asset cannot be sold on short notice for its market value.

B. Business risk is the risk of fluctuations in earnings before interest and taxes or in operating income when the firm uses no debt.

D. Price risk is a component of interest-rate risk.

9. An entity has recently purchased some shares of a competitor as part of a long-term plan to acquire the competitor. However, it is somewhat concerned that the market price of these shares could decrease over the short run. The entity could hedge against the possible decline in the shares' market price by

A. Purchasing a call option on those shares.

B. Purchasing a put option on those shares.

C. Selling a put option on those shares.

D. Obtaining a warrant option on those shares.

Answer (B) is correct.

A put option is the right to sell shares at a given price within a certain period. If the market price falls, the put option may allow the sale of shares at a price above market, and the profit of the option holder will be the difference between the price stated in the put option and the market price, minus the cost of the option, commissions, and taxes. The entity that issues the shares has nothing to do with put (and call) options.

A.A call option is the right to purchase shares at a given price within a specified period.

C.Selling a put option could force the entity to purchase additional shares if the option is exercised.

D.A warrant gives the holder a right to purchase shares from the issuer at a given price (it is usually distributed along with debt).

10.If a call option is out-of-the-money, the

A.Option has expired.

B.Value of the underlying asset is less than the exercise price.

C.Option no longer exists.

D.Option has become a put option.

Answer (B) is correct.

When the value of the asset underlying a call option is less than the exercise price of the option, the option is out of the money.

A.An out-of-the-money option may not have expired.

C.The option does exist; it is just not worth exercising.

D.Call options do not change into put options.

11.The activity of trading futures with the objective of reducing or controlling risk is called

A.Insuring.

B.Hedging.

C.Short-selling.

D.Factoring.

Answer (B) is correct.

Hedging is the use of offsetting commitments to minimize the effect of adverse future price movements. Thus, a financial manager may limit many risk exposures by trading in futures markets.

A. Insurance is a contract in which the insurer undertakes to guarantee the insured against loss from specified contingencies or perils up to a specified amount.

C. Short-selling is the sale of commodities or shares that are not owned in anticipation of a price decline.

D. Factoring is the sale of accounts receivable.

12. A call option on an ordinary share is more valuable when there is a lower

A. Market value of the underlying share.

B. Exercise price on the option.

C. Time to maturity on the option.

D. Variability of market price on the underlying share.

Answer (B) is correct.

The lower the exercise price, the more valuable the call option. The exercise price is the price at which the call holder has the right to purchase the underlying share.

A. A call option is the right to purchase an ordinary share at a set price for a set time period. If the underlying share has a lower market value, the call option is less, not more, valuable.

C. A call option is less, not more, valuable given less time to maturity. When the option has less time to maturity, the chance that the share price will rise is smaller.

D. A call option is less, not more, valuable if the price of the underlying share is less variable. Less variability means a lower probability of a price increase.

13. The use of derivatives to either hedge or speculate results in

A. Increased risk regardless of motive.

B. Decreased risk regardless of motive.

C. Offset risk when hedging and increased risk when speculating.

D. Offset risk when speculating and increased risk when hedging.

Answer (C) is correct.

Derivatives, including options and futures, are contracts between the parties who contract. Unlike equities and bonds, they are not claims on business assets. A futures contract is entered into as either a speculation or a hedge. Speculation involves the assumption of risk in the hope of gaining from price movements. Hedging is the process of using offsetting commitments to minimize or avoid the impact of adverse price movements.

A. Hedging decreases risk by using offsetting commitments that avoid the impact of adverse price movements.

B. Speculation involves the assumption of risk in the hope of gaining from price movements.

D. Speculating increases risk while hedging offsets risk.

14. When an entity finances each asset with a financial instrument of the same approximate maturity as the life of the asset, it is applying

A. Working capital management.

B. Return maximization.

C. Financial leverage.

D. A hedging approach.

Answer (D) is correct.

Maturity matching, or equalizing the life of an asset and the debt instrument used to finance that asset, is a hedging approach. The basic concept is that the entity has the entire life of the asset to recover the amount invested before having to pay the lender.

A. Working capital management is short-term asset management.

B. Return maximization is more aggressive than maturity matching. It entails using the lowest cost forms of financing.

C. Financial leverage is the relationship between debt and equity financing.

15. A forward contract involves a commitment today to purchase a product

- A. On a specific future date at a price to be determined sometime in the future.
- B. Sometime during the current day at its present price.
- C. On a specific future date at a price determined today.
- D. Only when its price increases above its current exercise price.

Answer (C) is correct.

A forward contract is an executory contract in which the parties involved agree to the terms of a purchase and a sale, but performance is deferred. Accordingly, a forward contract involves a commitment today to purchase a product on a specific future date at a price determined today.

- A. The price of a future contract is determined on the day of commitment, not sometime in the future.
- B. Performance is deferred in a future contract, and the price of the product is not necessarily its present price. The price can be any price determined on the day of commitment.
- D. A forward contract is an entity commitment to purchase a product. It is not based on a contingency. Also, a forward contract does not involve an exercise price (exercise price is in an option contract).

16. A put is an option that gives its owner the right to do which of the following?

- A. Sell a specific security at fixed conditions of price and time.
- B. Sell a specific security at a fixed price for an indefinite time period.
- C. Buy a specific security at fixed conditions of price and time.
- D. Buy a specific security at a fixed price for an indefinite time period.

Answer (A) is correct.

A put option gives the buyer the right to sell the underlying asset at a fixed price. An option has an expiration date after which it can no longer be exercised.

- B. An option has an expiration date after which it can no longer be exercised.
- C. A call option gives the buyer the right to buy the underlying asset.
- D. A call option gives the buyer the right to buy the underlying asset. An option can no longer be exercised after the expiration date.

17. A U.S. company and a European company purchased the same shares on a European exchange and held the shares for 1 year. If the value of the euro weakened against the U.S. dollar during the period, in comparison with the European company's return, the U.S. company's return will be

- A. Lower.
- B. Higher.
- C. The same.
- D. Indeterminate from the information provided.

Answer (A) is correct.

The U.S. company presumably used U.S. dollars to purchase euros that in turn were used for the share purchase. The European company presumably made a direct share purchase with euros. Given that the euro weakened against the U.S. dollar, at the end of the period the exchange rate in terms of euros per U.S. dollar was lower than when the share purchases were made. That is, a given amount of euros would purchase fewer U.S. dollars at the end of the period. Accordingly, the U.S. company's rate of return (euros to be exchanged for U.S. dollars ÷ U.S. dollars invested) is lower than the European company's return (euros ÷ euros invested). The reason is that the unfavorable exchange rate movement does not adversely affect the European company's rate of return.

- B. The return to the U.S. company is adversely affected by the exchange rate movement.
- C. The return to the U.S. company is directly affected by the exchange rate movement, while the return to the European company is not.
- D. The return to the U.S. company is adversely affected, and the return to the European company is unaffected.

18. When the U.S. dollar is expected to rise in value against foreign currencies, a U.S. company with foreign currency denominated receivables and payables should

- A. Slow down collections and speed up payments.
- B. Slow down collections and slow down payments.
- C. Speed up collections and speed up payments.
- D. Speed up collections and slow down payments.

Answer (D) is correct.

The U.S. firm should increase collections and decrease payments. Collections should be made quickly and converted into dollars to sustain the increase in their value as the dollar appreciates. Decreasing payments is profitable because, as the company exchanges dollars for foreign currency at a later date, it will receive more of the foreign currency, thus lowering its real cost.

A.Slowing collections and expediting payments increases the company's real cost.

B.Slowing collections does not maximize the amount of U.S. dollars received.

C.Expediting payments does not maximize the amount of U.S. dollars received.

19.When are foreign currency transaction gains or losses, relating to unsettled transactions, measured and recorded?

1. Transaction inception date

2. The date of the financial statements

3. The date the transaction is settled

A.3 only.

B.2 and 3 only.

C.1 and 3 only.

D.1, 2, and 3.

Answer (B) is correct.

A foreign currency transaction gain or loss results from a change in the exchange rate between the date the transaction was recognized, the date of the financial statements, and the date the transaction is settled. Thus, foreign currency transaction gains or losses are measured and recorded at the date of the financial statements and the date the transactions are settled.

A.The date the transaction is settled is not the only time a foreign currency transaction gain or loss is measured and recorded.

C.No foreign currency transaction gain or loss can occur on the transaction inception date because the transaction is initially measured at the exchange rate in effect at that date.

D.The initial measurement of the transaction uses the exchange rate in effect on the date the transaction was initially recognized. Thus, no foreign currency transaction gain or loss can occur on the transaction inception date.

20. Shore Co. records its transactions in U.S. dollars. A sale of goods resulted in a receivable denominated in Japanese yen, and a purchase of goods resulted in a payable denominated in euros. Shore recorded a foreign currency transaction gain on collection of the receivable and an exchange loss on settlement of the payable. The exchange rates are expressed as so many units of foreign currency to one dollar. Did the number of foreign currency units exchangeable for a dollar increase or decrease between the contract and settlement dates?

Yen Exchangeable for US \$1	Euros Exchangeable for US \$1
A. Increase	Increase
B. Decrease	Decrease
C. Decrease	Increase
D. Increase	Decrease

Answer (B) is correct.

When a foreign currency transaction results in a receivable or a payable, fixed in terms of the amount of foreign currency, a change in the exchange rate between the functional currency and the currency in which the transaction is denominated is a gain or loss that ordinarily should be included as a component of income from continuing operations in the period in which the exchange rate changes. A gain on a receivable denominated in a foreign currency results when the fixed amount of the foreign currency can be exchanged for a greater number of dollars at the date of collection, that is, when the number of foreign currency units exchangeable for a dollar decreases. A loss on a payable denominated in a foreign currency results when the number of dollars needed to purchase the fixed amount of the foreign currency increases, that is, when the number of foreign currency units exchangeable for a dollar decreases.

A. A gain on a foreign currency receivable and a loss on a foreign currency payable result when the dollar weakens.

C. A gain on a foreign currency receivable and a loss on a foreign currency payable result when the dollar weakens.

D. A gain on a foreign currency receivable and a loss on a foreign currency payable result when the dollar weakens.

21. Which of the following statements regarding foreign exchange gains and losses is true (where the exchange rate is the ratio of units of the functional currency to units of the foreign currency)?

- A. An exchange gain occurs when the exchange rate increases between the date a payable is recorded and the date of cash payment.
- B. An exchange gain occurs when the exchange rate increases between the date a receivable is recorded and the date of cash receipt.
- C. An exchange loss occurs when the exchange rate decreases between the date a payable is recorded and the date of the cash payment.
- D. An exchange loss occurs when the exchange rate increases between the date a receivable is recorded and the date of the cash receipt.

Answer (B) is correct.

A foreign currency transaction gain or loss (commonly known as a foreign exchange gain or loss) is recorded in earnings. When the amount of the functional currency exchangeable for a unit of the currency in which the transaction is fixed increases, a transaction gain or loss is recognized on a receivable or payable, respectively. The opposite occurs when the exchange rate (functional currency to foreign currency) decreases.

- A. The payable will become more expensive in the functional currency, resulting in a loss.
- C. The payable will become less expensive in the functional currency, resulting in a gain.
- D. An exchange gain occurs.

22. What is the effect when a foreign competitor's currency becomes weaker compared to the U.S. dollar?

- A. The foreign company will have an advantage in the U.S. market.
- B. The foreign company will be disadvantaged in the U.S. market.
- C. The fluctuation in the foreign currency's exchange rate has no effect on the U.S. company's sales or cost of goods sold.
- D. It is better for the U.S. company when the value of the U.S. dollar strengthens.

Answer (A) is correct.

If the foreign currency weakens compared with the U.S. dollar, the U.S. dollar will have more buying power in the foreign company's country. Thus, the foreign company will be able to sell more products than the U.S. company for the same amount of dollars.

- B. A weakening foreign currency makes foreign-produced products cheaper per U.S. dollar.

C. A weakening of the foreign currency will decrease the foreign company's prices relative to the U.S. company's.

D. A strengthening U.S. dollar can buy more of a weakening foreign currency (i.e., products produced in that country), effectively increasing the price of U.S.-produced products in the foreign market.

23. If the U.S. dollar price of the euro rises, which of the following will occur?

A. The dollar depreciates against the euro.

B. The euro depreciates against the dollar.

C. The euro will buy fewer European goods.

D. The euro will buy fewer U.S. goods.

Answer (A) is correct.

As the U.S. dollar price of the euro rises, the euro's buying power increases (i.e., it can be exchanged for more dollars than before). Thus, the buying power of the dollar has decreased.

B. If the U.S. dollar price of the euro rises, the euro's buying power increases (i.e., it can be exchanged for more dollars than before).

C. The euro's value with respect to European goods is not affected by its value with respect to the U.S. dollar.

D. If the U.S. dollar price of the euro rises, the euro's buying power increases, and the euro will buy more, not fewer, U.S. goods.

24. A U.S. company and a German company purchased the same stock on the German stock exchange and held the stock for 1 year. The value of the euro weakened against the dollar over this period. Comparing the returns of the two companies, the United States company's return will be

A. Lower.

B. Higher.

C. The same.

D. Indeterminate from the information provided.

Answer (A) is correct.

The returns on the stock are presumably paid in euros. Hence, the change in the value of the euro relative to the dollar does not affect the German company's return. However, the weakening of the euro reduces the number of dollars it will buy, and the U.S. company's return in dollars is correspondingly reduced.

B. The return to the U.S. company is adversely affected by the exchange rate movement.

C. The return to the U.S. company was directly affected by the exchange rate movement, but the return to the German company was not.

D. The return to the U.S. company was directly affected by the exchange rate movement, but the return to the German company was not.

25. A U.S. company has an account payable it must pay in 6 months with one Japanese company and an account receivable to be received in 6 months with another Japanese company. The U.S. company would not have transaction exposure if

A. Both the account payable and account receivable are denominated in U.S. dollars.

B. Both the account payable and the account receivable are denominated in Japanese yen and the yen account receivable is greater than the yen account payable.

C. Both the account payable and the account receivable are denominated in Japanese yen and the yen account receivable is less than the yen account payable.

D. The account payable is denominated in dollars and the account receivable is denominated in yen.

Answer (A) is correct.

This is the only listed answer choice that completely avoids exchange rate fluctuation risks

B. The downside risk to a foreign-denominated receivable is that the foreign currency might depreciate against the firm's domestic currency. The downside risk to a foreign-denominated payable is that the foreign currency might appreciate against the firm's domestic currency. Although both the receivable and the payable are denominated in the yen, the net amount still has to be exchanged back to U.S. dollars and faces the risks stated above.

C. The downside risk to a foreign-denominated receivable is that the foreign currency might depreciate against the firm's domestic currency. The downside risk to a foreign-denominated payable is that the foreign currency might appreciate against the firm's domestic currency. Although both the receivable and the payable are denominated in the yen, the net amount still has to be exchanged back to U.S. dollars and faces the risks stated above.

D. The downside risk to a foreign-denominated receivable is that the foreign currency might depreciate against the firm's domestic currency.

26.If a U.S. firm can buy £20,000 for US \$100,000, the rate of exchange for the pound is

- A.US \$.20
- B.US \$5
- C.US \$20
- D.US \$50

Answer (B) is correct.

Dividing US \$100,000 by £20,000 produces an exchange rate of US \$5 to the pound.

- A.The amount of US \$.20 is the exchange rate for the dollar, not the pound.
- C.The exchange rate is US \$5 to the pound.
- D.The exchange rate is US \$5 to the pound.

27.Entity X owns 90% of Entity Y. Early in the year, X lent Y US \$1,000,000. No payments have been made on the debt by year end. Proper accounting at year-end in the consolidated financial statements would

- A.Eliminate 100% of the receivable, the payable, and the related interest.
- B.Eliminate 100% of the receivable and the payable but not any related interest.
- C.Eliminate 90% of the receivable, the payable, and the related interest.
- D.Eliminate 90% of the receivable and the payable but not any related interest.

Answer (A) is correct.

In a consolidated statement of financial position, reciprocal balances, such as receivables and payables, between a parent and a consolidated subsidiary should be eliminated in their entirety regardless of the portion of the subsidiary's shares held by the parent. Thus, all effects of the US \$1,000,000 loan should be eliminated in the preparation of the year-end consolidated statement of financial position.

- B.The interest must be eliminated.
- C.All aspects of the transaction must be eliminated.

D.All aspects of the transaction must be eliminated.

28.Entity A acquires all of the voting shares of Entity B for US \$1,000,000. At the time of the acquisition, the net fair value of the identifiable assets acquired and liabilities assumed had a carrying amount of US \$900,000 and a fair value of US \$800,000. The amount of goodwill Entity A will record on the acquisition date is

- A.US \$0
- B.US \$100,000
- C.US \$200,000
- D.US \$300,000

Answer (C) is correct.

Given no prior equity interest or noncontrolling interest, goodwill equals the excess of the fair value of the consideration transferred over the fair value of the net of the identifiable assets acquired and liabilities assumed. Consequently, goodwill is US \$200,000 ($\$1,000,000 - \$800,000$).

- A.Goodwill must be recorded.
- B.The amount of US \$100,000 is the excess of the acquisition cost over the carrying amount.
- D.The amount of US \$300,000 equals goodwill plus the excess of the carrying amount over fair value.

29.In a business combination, the valuation of goodwill is a calculation

- A.To offset the bargain purchase cost.
- B.Of all of the unlimited life intangible assets.
- C.Of the residual paid above the fair value of the identifiable net assets.
- D.Of all of the increases in market valuation of the intangible assets acquired.

Answer (C) is correct.

According to ASC 350-20-20, goodwill is an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized. It is the excess of consideration transferred over the fair value of the net identifiable assets acquired.

A. Goodwill is not recorded if the business combination results in recognition of a gain from bargain purchase.

B. Goodwill is the excess of consideration transferred over the fair value of the net identifiable assets acquired.

D. Goodwill is calculated as the excess of consideration transferred over the fair value of the net identifiable assets acquired.

30. For the past several years, Company S has invested in the ordinary shares of Company A. Company S currently owns approximately 13% of the total of Company A's outstanding voting ordinary shares. Recently, managements of the two companies have discussed a possible combination of the two entities. If they decide to combine, how should the resulting combination be accounted for?

A. Uniting of interests.

B. Acquisition.

C. Part purchase, part uniting of interests.

D. Joint venture.

Answer (B) is correct.

All business combinations must be accounted for using the acquisition method. It involves (1) identifying the acquirer and the acquisition date; (2) recognizing and measuring the identifiable assets acquired, liabilities assumed, and any noncontrolling interest; and (3) recognizing and measuring goodwill or a gain from a bargain purchase.

A. The uniting-of-interests method (pooling-of-interests method) is not an acceptable method of accounting for business combinations.

C. Accounting for a business combination as part acquisition and part uniting of interests is not allowed.

D. A business combination cannot be accounted for as a joint venture. A joint venture requires some form of separate accounting by each venturer

31. In a business combination, the sum of the amounts assigned by the acquiring entity to assets acquired and liabilities incurred and assumed exceeds the consideration paid for the acquired entity. The excess should be reported as a

A. Deferred credit.

B. Reduction of the amounts assigned to current assets and a deferred credit for any unallocated portion.

C. Gain immediately in the income statement.

D.Pro rata reduction of the amounts assigned to all acquired assets and a gain for any unallocated portion.

Answer (C) is correct.

In a business combination, any excess of the fair value of the net assets acquired over the sum of the consideration transferred, any noncontrolling interests, and any previously held equity interest must be recognized immediately in the income statement as a gain.

A.A deferred credit is never recognized in such circumstances.

B.The allocated portion is reported as a gain, not as a deferred credit, and the values of the assets are not reduced below fair value.

D.The amounts assigned to certain acquired assets (most financial assets, assets to be disposed of by sale, etc.) are not reduced.

32.Consolidated financial statements are typically prepared when one entity has a majority voting interest in another unless

A.The subsidiary is a financial institution.

B.The fiscal year ends of the two entities are more than 3 months apart.

C.Control does not rest with the majority owners.

D.The two entities are in unrelated industries, such as manufacturing and real estate.

Answer (C) is correct.

Consolidation normally is required when one entity owns, directly or indirectly, more than 50% of the outstanding voting interests of another entity. However, a majority-owned subsidiary is not consolidated if control does not rest with the majority owners.

A.The nature of the subsidiary's business is irrelevant.

B.A difference in fiscal periods is irrelevant.

D.Whether the parent and subsidiary are in related industries is irrelevant.

33.What is the method of presenting a noncontrolling interest in a consolidated statement of financial position?

- A.As a separate item within the deferred credits section.
- B.As a deduction from (contra to) goodwill from consolidation, if any.
- C.By means of notes to the statement of financial position.
- D.As a separate item within the equity section.

Answer (D) is correct.

A noncontrolling interest is classified as an equity account and separated from the equity of majority shareholders within that section.

- A.The interests of noncontrolling shareholders represents an equity interest.
- B.A noncontrolling interest is independent of any goodwill.
- C.A noncontrolling interest must be recognized in the accounts.

34.Company A holds 25% of Company B's voting interests. Which of the following statements is true?

- A.Company A may account for its investment in Company B at fair value or according to the consolidation method.
- B.Company A may account for its investment in Company B using the revaluation model or the equity method.
- C.Company A must account for its investment in Company B at fair value.
- D.Company A may account for its investment in Company B at fair value or according to the equity method.

Answer (D) is correct.

An entity that is presumed to have significant influence over an investee may elect to adopt the fair value option or the equity method.

- A.Because Company A does not have control (>50% voting interests) over Company B, the consolidation method cannot be used.
- B.The revaluation model cannot be used.

C. Company A also may choose to account for its investment in Company B according to the equity method.

35. On December 31, Ott Co. had investments in equity securities as follows:

	Cost	Fair Value
Man Co.	US \$10,000	US \$ 8,000
Kemo, Inc.	9,000	11,000
Fenn Corp.	11,000	9,000
	<u>US \$30,000</u>	<u>US \$28,000</u>

Ott's December 31 balance sheet should report the equity securities as

- A. US \$26,000
- B. US \$28,000
- C. US \$29,000
- D. US \$30,000

Answer (B) is correct.

An investment in equity securities that does not result in significant influence or control over the investee is reported at fair value, and unrealized holding gains and losses are included in earnings. Consequently, the securities should be reported as US \$28,000.

- A. The amount of US \$26,000 is the lower of cost or fair value determined on an individual security basis.
- C. The amount of US \$29,000 is the average of the aggregate cost and aggregate fair value.
- D. The aggregate cost is US \$30,000.

36. Unrealized gains and losses on trading debt securities should be presented in the

- A. Statement of financial position.
- B. Income statement.
- C. Notes to the financial statements.
- D. Statement of retained earnings.

Answer (B) is correct.

Unrealized holding gains and losses on trading debt securities are included in earnings and are therefore reported in the income statement.

A. Unrealized holding gains and losses on trading debt securities are included in earnings and are reported in the income statement.

C. Unrealized holding gains and losses on trading debt securities must be recognized in the income statement.

D. Unrealized holding gains and losses on trading debt securities are included in earnings and are reported in the income statement.

37. During the year, an entity's retained earnings increased by US \$25,000. Profit for the year was US \$42,000. The only other change in retained earnings was for the declaration of cash dividends. The amount of dividends declared was

A. US \$25,000

B. US \$17,000

C. US \$42,000

D. US \$67,000

Answer (B) is correct.

Retained earnings is accumulated net income or loss. It is increased by net income and decreased by net loss and dividends. Ending retained earnings equals beginning retained earnings plus net income, minus dividends declared in the period. Given the increase of retained earnings of US \$25,000 and profits of US \$42,000, dividends declared must have been US \$17,000 ($\$42,000 - \$25,000$).

A. The amount of US \$25,000 is the increase in retained earnings.

C. The amount of US \$42,000 is the profit for the year.

D. The amount of US \$67,000 equals profit plus the increase in retained earnings.

38. When property other than cash is invested in a partnership, at what amount should the noncash property be credited to the contributing partner's capital account?

A. Fair value at the date of contribution.

- B. Contributing partner's original cost.
- C. Assessed valuation for property tax purposes.
- D. Contributing partner's tax basis.

Answer (A) is correct.

The capital account should be credited for the current fair value of the assets at the date of the contribution.

- B. Cost does not reflect depreciation or appreciation of the property.
- C. Fair value best reflects the economic substance of the transaction.
- D. Tax basis is determined differently than the true economic value of the property.

39. An entity has made all necessary adjusting entries and is now closing its accounts for the period. Dividends of US \$30,000 were declared and distributed during the year. The entry to close the dividends account would be

A.	Retained earnings Dividends	US \$30,000 US \$30,000
B.	Dividends Retained earnings	US \$30,000 US \$30,000
C.	Income summary Dividends	US \$30,000 US \$30,000
D.	Dividends Income summary	US \$30,000 US \$30,000

Answer (A) is correct.

Assuming a dividends or dividends declared account is debited when dividends payable is credited on the declaration date, it must be closed at the end of the period. The balance in this account is closed directly to retained earnings. The effect of declaring and paying dividends is to reduce retained earnings, so the entry is a debit to retained earnings and a credit to dividends.

- B. The closing entry should credit dividends and debit retained earnings.
- C. Dividends is closed directly to retained earnings.
- D. Dividends is closed directly to retained earnings by a credit.

40. A company reacquired 100,000 previously issued and outstanding shares for US \$500,000. The company will hold these shares as treasury stock. This transaction results in all of the following except

- A. A decrease in the number of shares outstanding.
- B. A direct decrease in shareholders' equity.
- C. A decrease in the number of shares authorized.
- D. A decrease in the current ratio.

Answer (C) is correct.

The company repurchased previously issued shares and held these shares as treasury stock. The treasury stock is still considered authorized. As such, there is no decrease in the number of shares authorized.

- A. The acquisition of treasury stock reduces the number of shares outstanding.
- B. The acquisition of treasury stock results in a direct decrease in equity.
- D. The purchase of treasury shares decreases current assets but has no effect on current liabilities. Thus, the purchase of treasury shares will result in a decrease in the current ratio, which is current assets divided by current liabilities.

41. How would a 5% stock dividend affect a company's additional paid-in capital and retained earnings when declared?

	<u>Additional Paid-in Capital</u>	<u>Retained Earnings</u>
A.	No change	Increase
B.	No change	Decrease
C.	Increase	Increase
D.	Increase	Decrease

Answer (D) is correct.

Retained earnings is the cumulative accrual-basis income of the corporation, minus amounts paid out in cash dividends, minus amounts reclassified as additional paid-in capital from stock dividends. Thus, stock dividends increase additional paid-in capital and decrease retained earnings.

A.Retained earnings is the cumulative accrual-basis income of the corporation, minus amounts paid out in cash dividends, minus amounts reclassified as additional paid-in capital from stock dividends. Thus, stock dividends increase additional paid-in capital and decrease retained earnings.

B.Retained earnings is the cumulative accrual-basis income of the corporation, minus amounts paid out in cash dividends, minus amounts reclassified as additional paid-in capital from stock dividends. Thus, stock dividends increase additional paid-in capital.

C.Retained earnings is the cumulative accrual-basis income of the corporation, minus amounts paid out in cash dividends, minus amounts reclassified as additional paid-in capital from stock dividends. Thus, stock dividends decrease retained earnings.

42.When an entity declares a cash dividend, retained earnings is decreased by the amount of the dividend on the date of

A.Declaration.

B.Record.

C.Payment.

D.Declaration or record, whichever is earlier.

Answer (A) is correct.

Retained earnings is debited and dividends payable is credited on the date of declaration.

B.No entry is made on the record date.

C.Dividends payable is debited and cash is credited at the payment date.

D.No entry is made on the record date.

43.An entity declared a cash dividend on its common stock on December 15, Year 1, payable on January 12, Year 2. How would this dividend affect equity on the following dates?

	<u>December 15, Year 1</u>	<u>December 31, Year 1</u>	<u>January 12, Year 2</u>
A.	Decrease	No effect	Decrease
B.	Decrease	No effect	No effect
C.	No effect	Decrease	No effect
D.	No effect	No effect	Decrease

Answer (B) is correct.

When cash dividends are declared, a liability to the shareholders is created because the dividends must be paid once they are declared. At the declaration date, retained earnings must be debited, resulting in a decrease in retained earnings. The effect is to decrease total equity (assets – liabilities) because liabilities are increased with no corresponding increase in assets. At the balance sheet date, no entry is made, and there is no effect on equity. When the cash dividends are subsequently paid, dividends payable is debited and cash is credited. Thus, at the payment date, equity is also not affected.

A. Payment has no effect on equity.

C. Declaration decreases equity but year-end has no effect.

D. Declaration decreases equity but payment has no effect.

44. The Flat and Iron partnership agreement provides for Flat to receive a 20% bonus on profits before the bonus. Remaining profits and losses are divided between Flat and Iron in the ratio of 2 to 3, respectively. Which partner has a greater advantage when the partnership has a profit and when it has a loss?

	<u>Profit</u>	<u>Loss</u>
A.	Flat	Iron
B.	Flat	Flat
C.	Iron	Flat
D.	Iron	Iron

Answer (B) is correct.

When the partnership has a loss, Iron is allocated 60% and Flat 40%. Hence, Flat has the advantage when the partnership has a loss. When the partnership has a profit, Flat receives 20% plus 40% of the remaining 80%, a total of 52% [$20\% + (40\% \times 80\%)$]. Thus, Flat also has the advantage in this situation.

A.Flat has the advantage in the case of a loss.

C.Flat has the advantage in the case of a profit.

D.Flat has the advantage in the case of either a profit or a loss. Flat's bonus is computed before any distribution of profit or loss.

45.Which of the following types of dividends do not reduce equity in the corporation?

A.Cash dividends.

B.Property dividends.

C.Liquidating dividends.

D.Stock dividends and split-ups in the form of a dividend.

Answer (D) is correct.

The issuance of a stock dividend results in a debit to retained earnings and credits to contributed capital for the fair value of the stock. A split-up effected in the form of a dividend requires capitalization of retained earnings equal to the amount established by the issuer's state of incorporation (usually par value). Consequently, neither a stock dividend nor a split-up effected in the form of a dividend has a net effect on equity.

A.Cash dividends reduce equity. They involve an immediate or promised future nonreciprocal distribution of assets.

B.Property dividends reduce equity. They involve an immediate or promised future nonreciprocal distribution of assets.

C.Liquidating dividends reduce equity. They involve an immediate or promised future nonreciprocal distribution of assets.

46.On May 1, Rhud Corp. declared and issued a 10% common stock dividend. Prior to this dividend, Rhud had 100,000 shares of US \$1 par value common stock issued and outstanding. The fair value of Rhud's common stock was US \$30 per share on May 1. As a result of the stock dividend, Rhud's total equity

- A. Increased by US \$300,000.
- B. Decreased by US \$300,000.
- C. Decreased by US \$10,000.
- D. Did not change.

Answer (D) is correct.

When a stock dividend is declared, a portion of retained earnings is reclassified as contributed capital. The net effect on total equity is thus US \$0.

- A. The amount of US \$300,000 is the total fair value of the shares outstanding prior to issuance of the stock dividend.
- B. The amount of US \$300,000 is the total fair value of the shares outstanding prior to issuance of the stock dividend.
- C. The amount of US \$10,000 is the par value of the shares issued as a stock dividend.

47. The following are the January 1 and June 30 statements of financial position of an entity (in millions):

	Jan. 1	June 30
Cash	US \$ 3	US \$ 4
Accounts receivable	5	4
Inventories	8	10
Fixed assets	10	11
Total assets	<u>US \$26</u>	<u>US \$29</u>
Accounts payable	US \$ 2	US \$ 3
Notes payable	4	3
Accrued wages	1	2
Long-term debt	9	11
Equity	10	10
Total liabilities and equity	<u>US \$26</u>	<u>US \$29</u>

From January 1 to June 30, the net working capital

- A. Decreased by US \$1 million.
- B. Stayed the same.
- C. Increased by US \$1 million.
- D. Increased by US \$2 million.

Answer (C) is correct.

Net working capital equals current assets (for this entity, cash, accounts receivable, and inventories) minus current liabilities (accounts payable, notes payable, accrued wages). From January 1 to June 30,

the net working capital increased by US \$1,000,000 $\{[(\$4 + \$4 + \$10) - (\$3 + \$3 + \$2)] - [(\$3 + \$5 + \$8) - (\$2 + \$4 + \$1)]\}$.

- A. A decrease of US \$1,000,000 results from omitting inventories.
- B. The difference between all assets and all liabilities stayed the same.
- D. An increase of US \$2,000,000 results from omitting accrued wages.

48. A service entity's working capital at the beginning of January was US \$70,000. The following transactions occurred during January:

Purchased office equipment for cash	US \$ 2,000
Paid short-term bank loan	6,500
Paid salaries	10,000

What is the amount of working capital at the end of January?

- A. US \$58,000
- B. US \$60,000
- C. US \$68,000
- D. US \$51,500

Answer (A) is correct.

Working capital is the excess of total current assets (CA) over total current liabilities (CL). Thus, working capital at the end of January equals US \$58,000 computed as follows:

		CA*	CL*
Beginning working capital	US \$70,000		
Purchased office equipment	(2,000)	D	N
Paid short-term bank loan	-0-	D	D
Paid salaries	(10,000)	D	N
Working capital, end of January	<u>US \$58,000</u>		

* N = no effect; I = increase; D = decrease

- B. A balance of US \$60,000 results from ignoring the cash purchase of office equipment.
- C. A balance of US \$68,000 results from ignoring the paid salaries.

D.A balance of US \$51,500 results from incorrectly considering the repayment of the short-term bank loan.

49.The following transactions occurred during a company's first year of operations:

- 1. Purchased a delivery van for cash**
- 2. Borrowed money by issuance of short-term debt**
- 3. Purchased treasury shares**

Q.Which of the items above caused a change in the amount of working capital?

- A.1 only.
- B.1 and 2 only.
- C.2 and 3 only.
- D.1 and 3 only.

Answer (D) is correct.

Working capital is calculated by subtracting total current liabilities from total current assets. The purchase of a delivery van for cash reduces current assets and has no effect on current liabilities. The borrowing of cash by incurring short-term debt increases current assets by the same amount as it increases current liabilities. Thus, it will have no effect on working capital. The purchase of treasury shares decreases current assets but has no effect on current liabilities. Thus, the purchases of the van and treasury shares affect working capital.

- A.The purchase of the treasury shares also affects working capital.
- B.The purchases of the van and treasury shares but not the issuance of short-term debt affect working capital.
- C.The purchases of the van and treasury shares but not the issuance of short-term debt affect working capital.

50.Fact Pattern: An entity's financial statements for the current year are presented below:

Statement of Financial Position		Statement of Income and Retained Earnings	
Cash	US \$100	Sales	US \$3,000
Accounts receivable	200	Cost of goods sold	(1,600)
Inventory	50	Gross profit	\$1,400
Net fixed assets	600	Operations expenses	(970)
Total assets	<u>US \$950</u>	Operating income	\$ 430
Accounts payable	US \$140	Interest expense	(30)
Long-term debt	300	Income before tax	\$ 400
Share capital	260	Income tax	(200)
Retained earnings	250	Net income	\$ 200
Total liabilities and equity	<u>US \$950</u>	Plus: Jan. 1 retained earnings	150
		Minus: Dividends	(100)
		Dec. 31 retained earnings	<u>US \$ 250</u>

The entity's net working capital is

- A. US \$160
- B. US \$210
- C. US \$350
- D. US \$490

Answer (B) is correct.

Net working capital is the difference between current assets and current liabilities. It equals US \$210 (\$100 cash + \$200 A/R + \$50 inventory – \$140 A/P).

- A. Net quick assets minus current liabilities equals US \$160.
- C. Current assets equals US \$350.
- D. Current assets plus current liabilities equals US \$490.

51.

Fact Pattern:

RST Corporation's Statements of Financial Position End of Year 5 and Year 6

Assets	Year 6	Year 5
Current assets:		
Cash	US \$ 5,000	US \$ 4,000
Marketable securities	3,000	2,000
Accounts receivable (net)	16,000	14,000
Inventory	30,000	20,000
Total current assets	\$ 54,000	\$ 40,000
Noncurrent assets:		
Long-term investments	11,000	11,000
PP&E	80,000	70,000
Intangibles	3,000	4,000
Total assets	<u>US \$148,000</u>	<u>US \$125,000</u>
Liabilities and Equity		
Current liabilities:		
Accounts payable	US \$ 11,000	US \$ 7,000
Accrued payables	1,000	1,000
Total current liabilities	\$ 12,000	\$ 8,000
Bonds payable, 10%, due Year 12	30,000	30,000
Total liabilities	<u>US \$ 42,000</u>	<u>US \$ 38,000</u>
Equity:		
Common stock, 2,400 shares, US \$10 par	US \$ 24,000	US \$ 24,000
Retained earnings	82,000	63,000
Total equity	<u>\$106,000</u>	<u>\$ 87,000</u>
Total liabilities and equity	<u>US \$148,000</u>	<u>US \$125,000</u>

The market value of RST's ordinary shares at the end of Year 6 was US \$100 per share.

What is RST's current ratio at the end of Year 6?

- A. 4.5 to 1.
- B. 2.4 to 1.
- C. 2.0 to 1.
- D. 1.5 to 1.

Answer (A) is correct.

The current ratio equals current assets divided by current liabilities. At the end of Year 6, it was 4.5 to 1 (US \$54,000 ÷ \$12,000).

B. A ratio of 2.4 to 1 results from dividing current liabilities by the amount of cash, which is not a meaningful ratio.

C. A ratio of 2.0 to 1 is the quick (acid-test) ratio (cash, marketable securities, and net receivables divided by total current liabilities).

D. A ratio of 1.5 to 1 results from dividing total current liabilities by the sum of cash and marketable securities, which is not a meaningful ratio.

52.Fact Pattern:

RST Corporation's Statements of Financial Position End of Year 5 and Year 6

Assets	Year 6	Year 5
Current assets:		
Cash	US \$ 5,000	US \$ 4,000
Marketable securities	3,000	2,000
Accounts receivable (net)	16,000	14,000
Inventory	30,000	20,000
Total current assets	\$ 54,000	\$ 40,000
Noncurrent assets:		
Long-term investments	11,000	11,000
PP&E	80,000	70,000
Intangibles	3,000	4,000
Total assets	US \$148,000	US \$125,000
Liabilities and Equity		
Current liabilities:		
Accounts payable	US \$ 11,000	US \$ 7,000
Accrued payables	1,000	1,000
Total current liabilities	\$ 12,000	\$ 8,000
Bonds payable, 10%, due Year 12	30,000	30,000
Total liabilities	US \$ 42,000	US \$ 38,000
Equity:		
Common stock, 2,400 shares, US \$10 par	US \$ 24,000	US \$ 24,000
Retained earnings	82,000	63,000
Total equity	\$106,000	\$ 87,000
Total liabilities and equity	US \$148,000	US \$125,000

The market value of RST's ordinary shares at the end of Year 6 was US \$100 per share.

What is RST's acid-test (or quick) ratio at the end of Year 6?

- A. 2.40 to 1.
- B. 2.18 to 1.
- C. 2.00 to 1.
- D. 1.50 to 1.

Answer (C) is correct.

The acid-test or quick ratio equals the sum of the quick assets (net accounts receivable, marketable securities, and cash) divided by current liabilities. This ratio at the end of Year 6 is 2.0 to 1 [(US \$5,000 + \$3,000 + \$16,000) ÷ \$12,000].

A. A ratio of 2.4 to 1 results from dividing total current liabilities (US \$12,000) by the amount of cash (US \$5,000), which is not a meaningful ratio.

B. A ratio of 2.18 to 1 results from dividing quick assets (US \$5,000 + \$3,000 + \$16,000) by accounts payable (US \$11,000) results in 2.18. The denominator should include all current liabilities other than accounts payable.

D. A ratio of 1.5 to 1 results from dividing total current liabilities (US \$12,000) by the sum of cash (US \$5,000) and marketable securities (US \$3,000), which is not a meaningful ratio.

53.Fact Pattern:

RST Corporation's Statements of Financial Position End of Year 5 and Year 6

Assets	Year 6	Year 5
Current assets:		
Cash	US \$ 5,000	US \$ 4,000
Marketable securities	3,000	2,000
Accounts receivable (net)	16,000	14,000
Inventory	30,000	20,000
Total current assets	<u>\$ 54,000</u>	<u>\$ 40,000</u>
Noncurrent assets:		
Long-term investments	11,000	11,000
PP&E	80,000	70,000
Intangibles	3,000	4,000
Total assets	<u>US \$148,000</u>	<u>US \$125,000</u>
Liabilities and Equity		
Current liabilities:		
Accounts payable	US \$ 11,000	US \$ 7,000
Accrued payables	1,000	1,000
Total current liabilities	<u>\$ 12,000</u>	<u>\$ 8,000</u>
Bonds payable, 10%, due Year 12	30,000	30,000
Total liabilities	<u>US \$ 42,000</u>	<u>US \$ 38,000</u>
Equity:		
Common stock, 2,400 shares, US \$10 par	US \$ 24,000	US \$ 24,000
Retained earnings	82,000	63,000
Total equity	<u>\$106,000</u>	<u>\$ 87,000</u>
Total liabilities and equity	<u>US \$148,000</u>	<u>US \$125,000</u>

The market value of RST's ordinary shares at the end of Year 6 was US \$100 per share.

Based on a comparison of RST's quick ratios in Year 5 and Year 6, what is a likely conclusion?

- A. RST has improved its management of long-term investments in Year 6.
- B. RST has written off obsolete inventory in Year 6.
- C. RST's ability to meet short-term financing needs has declined since Year 5.
- D. RST's ability to meet short-term financing needs has improved since Year 5.

Answer (C) is correct.

RST's quick ratio decreased from 2.5 in Year 5 [(US \$4,000 cash + \$2,000 marketable securities + \$14,000 net A/R) ÷ \$8,000] to 2.0 in Year 6 [(US \$5,000 + \$3,000 + \$16,000) ÷ \$12,000]. RST has fewer assets that are easily convertible to cash available to meet current liabilities. Thus, its ability to meet short-term financing needs (i.e., liquidity) has declined.

- A. The quick ratio compares the quick assets (current assets minus inventory) with current liabilities; it does not provide a basis for conclusions about long-term investments.
- B. The quick ratio does not consider inventory.
- D. RST is less liquid in Year 6.

54. The following account balances are from the December 31 statement of financial position of an entity:

Accounts payable

US \$ 67,000

Accounts receivable (net)	115,000
Cash	27,500
Deferred income taxes payable	
(expected to reverse more than 1 year from now)	37,500
Income taxes payable	70,000
Inventory	257,000
Land and building	752,000
Marketable securities	64,000
Notes payable within 1 year	54,000
Other current liabilities	22,500
Prepaid expenses	27,000

The quick ratio for this year is

- A.1.42
- B.1.08
- C.0.97
- D.0.82

Answer (C) is correct.

The acid-test (quick) ratio equals quick assets (cash, marketable securities, and accounts receivable) divided by current liabilities. Quick assets total US \$206,500 (\$27,500 cash + \$64,000 marketable securities + \$115,000 net accounts receivable). Given current liabilities of US \$213,500 (\$67,000 accounts payable + \$54,000 current notes payable + \$70,000 income taxes payable + \$22,500 other current liabilities), the quick ratio is 0.967 (US \$206,500 ÷ \$213,500).

- A.Excluding the income taxes payable from the current liabilities results in 1.42.
- B.Including prepaid expenses in the quick assets and excluding income taxes payable in the current liabilities results in 1.08.
- D.Including deferred income taxes payable in the current liabilities results in 0.82.

55.Fact Pattern: An entity has the following summary statement of financial position:

Cash	US \$ 10	Current liabilities	US \$ 30
Accounts receivable	26	Long-term liabilities	40
Inventory	6	Equity	30
Fixed assets	<u>58</u>	Total liabilities and equity	<u>US \$100</u>
Total assets	<u>US \$100</u>		

The entity has a current ratio of

- A.0.60
- B.1.40
- C.0.42
- D.0.40

Answer (B) is correct.

The current ratio equals current assets of \$42 (\$10 cash + \$26 accounts receivable + \$6 inventory) divided by current liabilities of \$30, or 1.40.

- A.Using total liabilities instead of current liabilities results in 0.60
- C.Using total liabilities and equity instead of current liabilities results in 0.42.
- D.Using working capital in the numerator results in 0.40.

56. Fact Pattern: An entity has the following summary statement of financial position:

Cash	US \$ 10	Current liabilities	US \$ 30
Accounts receivable	26	Long-term liabilities	40
Inventory	6	Equity	30
Fixed assets	<u>58</u>	Total liabilities and equity	<u>US \$100</u>
Total assets	<u>US \$100</u>		

The entity has a quick ratio of

- A.1.40
- B.0.51
- C.1.20
- D.1.00

Answer (C) is correct.

The quick ratio equals cash plus accounts receivable of \$36 ($\$10 + \26) divided by current liabilities of \$30, or 1.20.

- A. Improperly including inventory in the numerator results in 1.40.
- B. Using total liabilities instead of current liabilities results in 0.51.
- D. Total assets divided by total liabilities and equity equals 1.00.

57. An entity has US \$400 of current assets, composed of US \$200 of cash, US \$100 of accounts receivable, and US \$100 of inventory. The entity has US \$200 of long-term debt, US \$100 of accounts payable, and US \$75 of notes payable. The notes payable are due in 6 months. The acid-test ratio, to two decimal places, is

- A. 0.80
- B. 1.29
- C. 1.71
- D. 2.29

Answer (C) is correct.

The acid-test (quick) ratio equals current assets (US \$400) minus inventories (US \$100), divided by current liabilities (US $\$100 + \$75 = \$175$), or 1.71.

- A. Using total liabilities instead of current liabilities results in 0.80.
- B. Using working capital in the numerator results in 1.29.
- D. Improperly including inventory in the numerator results in 2.29, i.e., the current ratio.

58. Given an acid-test ratio of 2.0, current assets of US \$5,000, and inventory of US \$2,000, the value of current liabilities is

- A. US \$1,500
- B. US \$2,500
- C. US \$3,500
- D. US \$6,000

Answer (A) is correct.

The acid-test, or quick, ratio equals quick assets (cash, marketable securities, and net accounts receivable) divided by current liabilities. Current assets equal the quick assets plus inventory and prepaid expenses. This question assumes that the entity has no prepaid expenses. Given current assets of US \$5,000, inventory of US \$2,000, and no prepaid expenses, the quick assets must be US \$3,000. Because the acid-test ratio is 2.0, the quick assets are double the current liabilities. Current liabilities therefore are equal to US \$1,500 ($\$3,000 \text{ quick assets} \div 2.0$).

B. Dividing the current assets by 2.0 results in US \$2,500. Current assets includes inventory, which should not be included in the calculation of the acid-test ratio.

C. Adding inventory to current assets rather than subtracting it results in US \$3,500.

D. Multiplying the quick assets by 2 instead of dividing by 2 results in US \$6,000.

59. A condensed comparative statement of financial position for an entity appears below:

	12/31/Yr 1	12/31/Yr 2
Cash	US \$ 40,000	US \$ 30,000
Accounts receivable	120,000	100,000
Inventory	200,000	300,000
Property, plant, & equipment	500,000	550,000
Accumulated depreciation	(280,000)	(340,000)
Total assets	<u>US \$ 580,000</u>	<u>US \$ 640,000</u>
Current liabilities	US \$ 60,000	US \$ 100,000
Long-term liabilities	390,000	420,000
Shareholders' equity	130,000	120,000
Total liabilities and equity	<u>US \$ 580,000</u>	<u>US \$ 640,000</u>

In looking at liquidity ratios at both reporting dates, what happened to the current ratio and acid-test (quick) ratio?

	Current Ratio	Acid-Test Ratio
A.	Increased	Increased
B.	Increased	Decreased
C.	Decreased	Increased
D.	Decreased	Decreased

Answer (D) is correct.

The current ratio is determined by dividing current assets by current liabilities. The acid-test ratio is determined by dividing quick assets by current liabilities. At December 31, Year 1, the current ratio is 6 to 1 [$(\text{US } \$40,000 + \$120,000 + \$200,000) \div \$60,000$]. At December 31, Year 2, the current ratio is 4.3 to 1 [$(\text{US } \$30,000 + \$100,000 + \$300,000) \div \$100,000$]. Hence, there was a decrease in the current ratio. At December 31, Year 1, the acid-test ratio is 2.667 to 1 [$(\text{US } \$40,000 + \$120,000) \div \$60,000$].

At December 31, Year 2, the acid-test ratio is 1.3 to 1 $[(US \$30,000 + \$100,000) \div \$100,000]$. Thus, the acid-test ratio also declined.

- A. Both ratios decreased.
- B. The current ratio also decreased.
- C. The acid-test ratio also decreased.

60. Fact Pattern: Presented below are partial year-end financial statement data for entities A and B.

	A	B
Cash	US \$100	US \$200
Accounts receivable	unknown	100
Inventories	unknown	100
Net fixed assets	200	100
Accounts payable	100	50
Long-term debt	200	50
Common stock	100	200
Retained earnings	150	100
	<u>A</u>	<u>B</u>
Sales	US \$600	US \$5,800
Cost of goods sold	300	5,000
Administrative expenses	100	500
Depreciation expense	100	100
Interest expense	20	10
Income tax expense	40	95
Net income	40	95

Q. Based on 365 days per year, B has days' sales outstanding to the nearest full day of

- A. 0 days.
- B. 3 days.
- C. 6 days.
- D. 7 days.

Answer (C) is correct.

Days' sales in receivables (the average collection period) equals the days in the year divided by the receivables turnover ratio (net credit sales \div average accounts receivable). Assuming sales are net credit sales and that ending accounts receivable equals average accounts receivable, the turnover ratio is 58 ($US \$5,800 \div \100), and the days' sales in receivables equals 6 days ($365 \div 58$) (rounded).

- A. Accounts receivable divided by sales equals 0 days.
- B. If accounts payable is used rather than accounts receivable, the result is 3 days.
- D. If average cost of goods sold per day is used rather than sales, the result is 7 days.

61.Fact Pattern:

UVW Corporation's Income Statement for Year 5 and Year 6		
	Year 6	Year 5
Sales (all are credit)	US \$285,000	US \$200,000
Cost of goods sold	150,000	120,000
Gross profit	\$135,000	\$ 80,000
S and A expense	65,000	36,000
Income bef. int. & inc. tax	\$ 70,000	\$ 44,000
Interest expense	3,000	3,000
Income before income tax	\$ 67,000	\$ 41,000
Income tax expense	27,000	16,000
Net income	US \$ 40,000	US \$ 25,000

UVW Corporation's Statements of Financial Position End of Year 5 and Year 6		
	Year 6	Year 5
Assets		
Current assets:		
Cash	US \$ 5,000	US \$ 4,000
Marketable securities	3,000	2,000
Accounts receivable (net)	16,000	14,000
Inventory	30,000	20,000
Total current assets	\$ 54,000	\$ 40,000
Noncurrent assets:		
Long-term investments	11,000	11,000
PP&E	80,000	70,000
Intangibles	3,000	4,000
Total assets	US \$148,000	US \$125,000
Liabilities and Equity		
Current liabilities:		
Accounts payable	US \$ 11,000	US \$ 7,000
Accrued payables	1,000	1,000
Total current liabilities	\$ 12,000	\$ 8,000
Bonds payable, 10%, due Year 12	30,000	30,000
Total liabilities	US \$ 42,000	US \$ 38,000
Equity:		
Common stock, 2,400 shares, US \$10 par	US \$ 24,000	US \$ 24,000
Retained earnings	82,000	63,000
Total equity	\$106,000	\$ 87,000
Total liabilities and equity	US \$148,000	US \$125,000

The market value of UVW's common stock at the end of Year 6 was US \$100 per share.

Q.What is UVW's accounts receivable turnover for Year 6?

- A.19 times.
- B.16 times.
- C.10 times.
- D.6 times.

Answer (A) is correct.

The accounts receivable turnover equals net credit sales divided by average trade receivables (net). In Year 6, the accounts receivable turned over 19 times {US \$285,000 ÷ [(\$16,000 ending A/R + \$14,000 beginning A/R) ÷ 2]}.

B.The amount of 16 times was incorrectly derived by dividing average sales of Years 5 and 6 [(US \$285,000 + \$200,000) ÷ 2] by average receivables (US \$15,000), which produces no meaningful ratio.

C.The amount of 10 times was incorrectly derived by dividing cost of goods sold (US \$150,000) for Year 6 by average accounts receivable (US \$15,000), which produces no meaningful ratio.

D.The amount of 6 times is the inventory turnover ratio, which equals the cost of goods sold for Year 6 (US \$150,000) divided by average inventory (US \$25,000).

62.An analysis of inventory turnover in a store’s clothing department indicated extremely low turnover. Which of the following would most likely increase the turnover rate?

A.Increase inventories.

B.Increase sales incentives.

C.Increase selling prices.

D.Decrease the frequency of purchases but maintain the same level of inventory.

Answer (B) is correct.

Inventory turnover equals cost of sales divided by average inventory. Reducing inventory therefore increases turnover. Sales incentives to improve sales should lower inventory levels.

A.Increasing the denominator of the ratio would only further decrease turnover.

C.Increasing price would probably decrease sales, thereby further decreasing turnover.

D.A constant inventory level would not affect the turnover rate.

63.Fact Pattern: An entity had the following opening and closing inventory balances during the current year:

	1/1	12/31
Total inventory	US \$415,000	US \$565,000

Q:Assume that cost of goods sold for the current year ended December 31 is US \$2,000,000. Inventory turnover on total inventory for the entity would be

A.2.04 times.

- B.3.54 times.
- C.4.08 times.
- D.4.82 times.

Answer (C) is correct.

Inventory turnover is the ratio of cost of goods sold to the average inventory balance. The total average inventory is US \$490,000 $[(\$415,000 + \$565,000) \div 2]$. Hence, total inventory turnover is 4.08 times (US \$2,000,000 COGS \div \$490,000 average total inventory).

- A.A turnover of 2.04 times results from adding the opening and closing inventory balances to obtain the denominator of the turnover ratio.
- B.A turnover of 3.54 times results from using the year-end inventory balance only.
- D.A turnover of 4.82 times results from using the opening inventory balance only.

64.Fact Pattern: An entity has the following income statements:

	Year 2	Year 1
Sales	US \$1,500,000	US \$1,400,000
Cost of goods sold	<u>(800,000)</u>	<u>(750,000)</u>
Gross profit	\$ 700,000	\$ 650,000
Selling and administrative expense	(62,000)	(60,000)
Depreciation expense	<u>(50,000)</u>	<u>(50,000)</u>
Income before interest and taxes	\$ 688,000	\$ 540,000
Interest expense	<u>(100,000)</u>	<u>(100,000)</u>
Income before taxes	\$ 588,000	\$ 440,000
Income tax (50%)	<u>(294,000)</u>	<u>(220,000)</u>
Net income	<u>US \$ 294,000</u>	<u>US \$ 220,000</u>

Selected items on the statement of financial position are as follows:

Selected items on the statement of financial position are as follows:

	Year 2 Year End	Year 1 Year End
Accounts receivable	US \$300,000	US \$200,000
Accounts payable	250,000	275,000

Assume a 365-day year in any calculations.

Q.Based on the Year 2 year-end balance of accounts receivable and the Year 2 income statement, the company had an average collection period for Year 2 of

- A.49 days.
- B.52 days.

C.73 days.

D.78 days.

Answer (C) is correct.

The average collection period for Year 2 is 73 days [US \$300,000 accounts receivable ÷ (\$1,500,000 sales ÷ 365 days)].

A.Improperly using accounts receivable from Year 1 instead of Year 2 results in 49 days.

B.The average collection period for Year 1 is 52 days.

D.Improperly using Year 1 annual sales results in 78 days.

65.Each of the following periods is included when computing a firm's target cash conversion cycle except the

A.Inventory conversion period.

B.Payables deferral period.

C.Average collection period.

D.Cash discount period.

Answer (D) is correct.

The cash conversion cycle is the amount of time that passes between the actual outlay of cash for inventory purchases and the collection of cash from the sale of that inventory. It equals the inventory conversion period, plus the average collection period, minus the payables deferral period. The inventory conversion period equals days' sales in inventory. The average collection period equals the days' sales in receivables. The payables deferral period is the average time between the purchase of materials and the payment of cash.

A.The inventory conversion period is included in the cash conversion cycle.

B.The payables deferral period is included in the cash conversion cycle

C.The average collection period is included in the cash conversion cycle.

66.An entity sells 10,000 skateboards a year at US \$66 each. All sales are on credit. Assume that the average collection period is 25 days. After the credit policy is well established, what is the expected average accounts receivable balance for the entity at any moment in time, assuming a 365-day year?

- A. US \$684.93
- B. US \$1,808.22
- C. US \$27,123.30
- D. US \$45,205.48

Answer (D) is correct.

The expected average accounts receivable balance equals the average collection period times the credit sales per day. Assuming that receivables are recorded at their gross amounts, the average accounts receivable balance is US \$45,205.48 [(10,000 units sold on credit × \$66 price) × (25 days ÷ 365 days)].

- A. The amount of US \$684.93 is based on annual credit sales of US \$10,000.
- B. The amount of US \$1,808.22 equals the credit sales per day.
- C. The amount of US \$27,123.30 is based on a 15-day average collection period.

67. An entity has a high fixed assets turnover ratio. What conclusion can a financial analyst draw from this?

- A. The entity may be overcapitalized.
- B. The entity may have a problem with employees converting inventory to personal use.
- C. The entity may be undercapitalized.
- D. The entity has favorable profitability.

Answer (C) is correct.

The fixed assets turnover ratio equals net sales divided by net fixed assets. A high ratio indicates either that the entity is undercapitalized, that is, it cannot afford to buy enough fixed assets, or that it uses fixed assets efficiently.

- A. The ratio may indicate undercapitalization.
- B. Fluctuations in inventory do not affect fixed-assets turnover.
- D. The fixed assets turnover ratio is not a profitability indicator. It measures the efficiency of asset management.

68. A growing entity is assessing current working capital requirements. An average of 58 days is required to convert raw materials into finished goods and to sell them. Then an average of 32 days is required to collect on receivables. If the average time the entity takes to pay for its raw materials is 15 days after they are received, the total cash conversion cycle is

- A. 11 days.
- B. 41 days.
- C. 75 days.
- D. 90 days.

Answer (C) is correct.

The cash conversion cycle is the length of time between paying for purchases and receiving cash from the sale of finished goods. It equals the inventory conversion period, plus the receivables collection period, minus the payables deferral period, or 75 days (58 days + 32 days – 15 days).

- A. Subtracting, rather than adding, the receivables collection period results in 11 days.
- B. Subtracting, rather than adding, the receivables collection period and adding, rather than subtracting, the payables deferral period results in 41 days.
- D. Failing to subtract the payables deferral period results in 90 days.

69. If the average age of inventory is 60 days, the average age of the accounts payable is 30 days, and the average age of accounts receivable is 45 days, the number of days in the cash conversion cycle is

- A. 135 days.
- B. 90 days.
- C. 75 days.
- D. 105 days.

Answer (C) is correct.

The cash conversion cycle begins when the entity pays for merchandise it has purchased and ends when the entity receives cash from the sale of the merchandise. Inventory is held for an average of 60 days prior to sale, but the average age of accounts payable is 30 days. Consequently, the average time between outlay and sale is 30 days. Receivables are collected an average of 45 days after sale, so the length of the cash conversion cycle is 75 days (30 + 45).

- A.The age of payables should be deducted from the sum of the other items.
- B.The payables are not added to the inventory period. They are deducted.
- D.The sum of the inventory cycle and the receivables cycle equals 105 days.

70.An entity purchased a new machine for US \$500,000 by borrowing the required funds from a bank for 180 days. What will be the direct impact of this transaction?

- A.Decrease the current ratio and increase the debt ratio.
- B.Increase the current ratio and decrease the debt ratio.
- C.Increase the current ratio and increase the debt ratio.
- D.Decrease the current ratio and decrease the debt ratio.

Answer (A) is correct.

The borrowing of funds for 180 days constitutes short-term borrowing. The new machine is a fixed asset. Current liabilities have increased, and current assets have remained constant. Consequently, the current ratio (current assets ÷ current liabilities) has decreased. Total debt and total assets increased by the same absolute amount, and the debt ratio (total debt ÷ total assets) should have increased, assuming total debt is less than total assets.

- B.The current ratio decreased and the debt ratio increased.
- C.The current ratio decreased.
- D.The debt ratio increased.

71.Fact Pattern:

Exhibit A
Statement of Financial Position

	Year 1
<u>Assets</u>	<u>(millions)</u>
Cash	US \$ 300
Marketable securities	400
Accounts receivable	200
Inventories	400
Net plant and equipment	1,700
Total assets	<u>US \$3,000</u>
<u>Liabilities and Equity</u>	
Accounts payable	US \$ 300
Notes payable	400
Accrued wages	50
Accrued taxes	150
Debentures	600
Common stock	500
Retained earnings	1,000
Total liabilities and equity	<u>US \$3,000</u>

Q.Based on the statement of financial position shown in Exhibit A, the debt ratio is

- A.20%
- B.40%
- C.50%
- D.100%

Answer (C) is correct.

The debt ratio equals total debt divided by total assets, or .50 [(US \$3,000,000,000 total debt and equity – \$500,000,000 ordinary equity – \$1,000,000,000 retained earnings) ÷ \$3,000,000,000 total assets].

- A.Excluding short-term debt results in 20%.
- B.Excluding long-term debt by total equity results in 40%.
- D.Dividing total debt by total equity results in 100%.

72.The relationship of the total debt to the total equity of a corporation is a measure of

- A.Liquidity.
- B.Profitability.
- C.Creditor risk.
- D.Break even.

Answer (C) is correct.

The debt-to-equity ratio is a measure of risk to creditors. It indicates how much equity is available to absorb losses before the interests of debt holders are impaired. The less leveraged the firm, the safer the creditors' interests.

A.Liquidity relates to how quickly cash can be made available to pay debts as they come due.

B.The debt-to-equity ratio evaluates a firm's capital structure and is not oriented toward the balance sheet. It does not measure the use (profits) made of assets.

D.Breakeven relates to profitability, not financing.

73.Fact Pattern:

	Year 6	Year 5
Sales (all are credit)	US \$285,000	US \$200,000
Cost of goods sold	150,000	120,000
Gross profit	\$135,000	\$ 80,000
S and A expense	65,000	36,000
Income bef. int. & inc. tax	\$ 70,000	\$ 44,000
Interest expense	3,000	3,000
Income before income tax	\$ 67,000	\$ 41,000
Income tax expense	27,000	16,000
Net income	<u>US \$ 40,000</u>	<u>US \$ 25,000</u>

	Year 6	Year 5
Assets		
Current assets:		
Cash	US \$ 5,000	US \$ 4,000
Marketable securities	3,000	2,000
Accounts receivable (net)	16,000	14,000
Inventory	30,000	20,000
Total current assets	<u>\$ 54,000</u>	<u>\$ 40,000</u>
Noncurrent assets:		
Long-term investments	11,000	11,000
PP&E	80,000	70,000
Intangibles	3,000	4,000
Total assets	<u>US \$148,000</u>	<u>US \$125,000</u>
Liabilities and Equity		
Current liabilities:		
Accounts payable	US \$ 11,000	US \$ 7,000
Accrued payables	1,000	1,000
Total current liabilities	<u>\$ 12,000</u>	<u>\$ 8,000</u>
Bonds payable, 10%, due Year 12	30,000	30,000
Total liabilities	<u>US \$ 42,000</u>	<u>US \$ 38,000</u>
Equity:		
Common stock, 2,400 shares, US \$10 par	US \$ 24,000	US \$ 24,000
Retained earnings	82,000	63,000
Total equity	<u>\$106,000</u>	<u>\$ 87,000</u>
Total liabilities and equity	<u>US \$148,000</u>	<u>US \$125,000</u>

The market value of UVW's common stock at the end of Year 6 was US \$100 per share.

Q.Based on a comparison of UVW's times-interest-earned ratios in Year 5 and Year 6, what is a likely conclusion?

- A.UVW's long-run solvency has declined.
- B.UVW's long-run solvency has improved.
- C.UVW's liquidity has improved.
- D.UVW's liquidity has declined.

Answer (B) is correct.

The times-interest-earned ratio increased from 14.67 times in Year 5 ($44,000 \div 3,000$) to 23.33 times in Year 6 ($70,000 \div 3,000$). This increase signifies that UVW has more profit available to meet the interest payments on its debt and that long-run solvency has improved. Consequently, creditors will view UVW's obligations as less risky.

- A.Long-run solvency has improved.
- C.Liquidity is an entity's short-term solvency, that is, its ability to meet current liabilities with current assets by converting assets to cash. It is not related to the times-interest-earned ratio, which compares profit before interest and taxes with interest expense associated with long-term investments.
- D.The times-interest-earned ratio is not a liquidity measure.

74.The times-interest-earned ratio is primarily an indication of

- A.Solvency.
- B.Liquidity.
- C.Asset management.
- D.Profitability.

Answer (A) is correct.

The times-interest-earned ratio equals profit or loss before taxes and interest divided by interest. It measures the extent to which operating profit can decline before the entity is unable to meet its annual interest cost. Thus, it is a measure of debt-paying capacity (solvency).

- B.Liquidity ratios, e.g., the current ratio, indicate the relationship of current assets to current liabilities.
- C.Asset management ratios indicate how effectively the entity is using its assets
- D.Profitability ratios measure operating results.

75. Fact Pattern: An entity reports the following account balances at year end:

Account	Balance
Long-term debt	US \$200,000
Cash	50,000
Net sales	600,000
Fixed assets (net)	320,000
Tax expense	67,500
Inventory	25,000
Common stock	100,000
Interest expense	20,000
Administrative expense	35,000
Retained earnings	150,000
Accounts payable	65,000
Accounts receivable	120,000
Cost of goods sold	400,000
Depreciation expense	10,000

Additional Information:

The opening balance of common stock was US \$100,000.

The opening balance of retained earnings was US \$82,500.

The entity had 10,000 common stock outstanding all year.

No dividends were paid during the year.

Q:For the year just ended, the entity has times-interest-earned of

- A. 3.375 times.
- B. 6.75 times.
- C. 7.75 times.
- D. 9.5 times.

Answer (C) is correct.

Times-interest-earned is a solvency ratio. It emphasizes the ability to pay interest expense. The ratio equals profit before interest and taxes divided by interest.

$$\begin{aligned} &= \frac{(\text{Sales} - \text{COGS} - \text{Administrative Expense} - \text{Depreciation})}{\text{Interest Expense}} \\ &= \frac{\text{US } \$600,000 - \$400,000 - \$35,000 - \$10,000}{\text{US } \$20,000} \\ &= 7.75 \text{ times} \end{aligned}$$

- A. Improperly subtracting taxes and interest from the numerator results in 3.375 times.
- B. Improperly subtracting interest from the numerator results in 6.75 times.
- C. Failing to subtract the administrative expenses from the numerator results in 9.5 times.

76. Fact Pattern: Presented below are partial year-end financial statement data for entities A and B.

	A	B
Cash	US \$100	US \$200
Accounts receivable	unknown	100
Inventories	unknown	100
Net fixed assets	200	100
Accounts payable	100	50
Long-term debt	200	50
Common stock	100	200
Retained earnings	150	100
	A	B
Sales	US \$600	US \$5,800
Cost of goods sold	300	5,000
Administrative expenses	100	500
Depreciation expense	100	100
Interest expense	20	10
Income tax expense	40	95
Net income	40	95

Answer (B) is correct.

The times-interest-earned ratio for A equals profit before interest and tax divided by interest expense. Profit before interest and tax is US \$100 (\$40 profit + \$20 interest + \$40 tax expense). Interest was earned five times (US \$100 ÷ \$20).

A.If profit before tax rather than profit before interest and tax is used in the formula, four times is the result.

C.If depreciation expense is not deducted in calculating profit before interest and tax, 10 times is the result.

D.If gross margin is used in the numerator rather than profit before interest and tax, 15 times is the result.

77.Which of the outcomes represented in the following table would result from an entity's retirement of debt with excess cash?

	<u>Total Assets Turnover Ratio</u>	<u>Following Period's Interest- Earned Ratio</u>
A.	Increase	Increase
B.	Increase	Decrease
C.	Decrease	Increase
D.	Decrease	Decrease

Answer (A) is correct.

Because total assets will decline without any impact on sales, the total assets turnover ratio (sales ÷ total assets) will increase. In addition, a reduced debt level should cause a reduction in annual interest payments, so the times-interest-earned ratio [(profit + interest + taxes) ÷ interest] should increase.

- B.The times-interest-earned ratio will increase.
- C.The total assets turnover ratio will increase.
- D.Both ratios will increase.

78.A shareholder wants to evaluate Alan Co.'s ability to pay its long-term obligations and remain in business in the long run. To accomplish this, the shareholder should use what type of ratios?

- A.Activity ratios.
- B.Liquidity ratios.
- C.Profitability ratios.
- D.Solvency ratios.

Answer (D) is correct.

Solvency ratios measure an entity's ability to pay its noncurrent obligations as they come due and remain in business in the long run.

- A.Activity ratios reflect how quickly major noncash assets are converted to cash. They are not the best ratios to use to evaluate a company's ability to pay long-term obligations.
- B.Liquidity ratios measure an entity's ability to pay its current, not long-term, obligations.
- C.Profitability ratios measure an entity's ability to generate earnings. They are not the best ratios to use to measure an entity's ability to pay its long-term obligations.

79.If a high percentage of an entity's total costs is fixed, the entity's operating leverage will be

- A.High.
- B.Low.
- C.Unchanged.
- D.Unable to be determined.

Answer (A) is correct.

Operating leverage is the extent to which a firm's costs of operating are fixed as opposed to variable. Operating leverage equals fixed costs divided by total costs. Therefore, if a high percentage of an entity's total cost is fixed, the entity is said to have high operating leverage.

- B. The opposite is true.
- C. The entity has high operating leverage.
- D. The entity has high operating leverage.

80. Return on investment (ROI) is a very popular measure employed to evaluate the performance of corporate segments because it incorporates all of the major ingredients of profitability (revenue, cost, investment) into a single measure. Under which one of the following combination of actions regarding a segment's revenues, costs, and investment would a segment's ROI always increase?

	Revenues	Costs	Investment
A.	Increase	Decrease	Increase
B.	Decrease	Decrease	Decrease
C.	Increase	Increase	Increase
D.	Increase	Decrease	Decrease

Answer (D) is correct.

An increase in revenue and a decrease in costs will increase the ROI numerator. A decrease in investment will decrease the denominator. The ROI must increase in this situation.

- A. ROI is not certain to increase if investment increases.
- B. ROI is not certain to increase if revenue, costs, and investment decrease.
- C. ROI is not certain to increase if costs and investment increase.

81. Fact Pattern:

	Year 1 (millions)
Assets	
Cash	US \$ 300
Marketable securities	400
Accounts receivable	200
Inventories	400
Net plant and equipment	1,700
Total assets	<u>US \$3,000</u>
Liabilities and Equity	
Accounts payable	US \$ 300
Notes payable	400
Accrued wages	50
Accrued taxes	150
Debentures	600
Common stock	500
Retained earnings	1,000
Total liabilities and equity	<u>US \$3,000</u>

Q. An entity experienced sales of US \$5 billion, profit before interest and taxes of US \$200 million, profit before taxes of US \$100 million, and profit of US \$70 million. Based on this information

and the entity's statement of financial position information in Exhibit A, the return on equity (ROE) is

- A.4.67%
- B.6.67%
- C.13.33%
- D.14%

Answer (A) is correct.

The return on equity equals profit (US \$70,000,000) divided by equity (\$500,000,000 common shares + \$1,000,000,000 retained earnings).

- B.Using profit before taxes instead of profit results in 6.67%.
- C.Using profit before interest and taxes instead of profit results in 13.33%.
- D.Dividing profit by common shares results in 14%.

82.Fact Pattern: An entity reports the following account balances at year end:

Account	Balance
Long-term debt	US \$200,000
Cash	50,000
Net sales	600,000
Fixed assets (net)	320,000
Tax expense	67,500
Inventory	25,000
Common stock	100,000
Interest expense	20,000
Administrative expense	35,000
Retained earnings	150,000
Accounts payable	65,000
Accounts receivable	120,000
Cost of goods sold	400,000
Depreciation expense	10,000

Additional Information:

The opening balance of common stock was US \$100,000.

The opening balance of retained earnings was US \$82,500.

The entity had 10,000 common stock outstanding all year.

No dividends were paid during the year.

Q.For the year just ended, the entity had a rate of return on equity, rounded to two decimals, of

- A.31.21%

- B.58.06%
- C.67.50%
- D.71.68%

Answer (A) is **correct**.
 Rate of return on equity, a profitability ratio, measures the rate of return on investment. The ratio equals profit (minus any preferred dividends) divided by average ordinary equity.

$$\frac{\text{Sales} - \text{COGS} - \text{Adm. Exp.} - \text{Deprec.} - \text{Interest} - \text{Tax}}{(\text{Beginning Ordinary Equity} + \text{Ending Ordinary Equity}) \div 2}$$

$$= \frac{\text{US } \$600,000 - \$400,000 - \$35,000 - \$10,000 - \$20,000 - \$67,500}{(\text{US } \$182,500 + \$250,000) \div 2}$$

$$= \frac{\text{US } \$67,500}{\text{US } \$216,250}$$

$$= 31.21\%$$

- B.Excluding common stock from the denominator results in 58.06%.
- C.Excluding retained earnings from the denominator results in 67.50%.
- D.Excluding interest expense and tax expense from the numerator results in 71.68%.

83.The following ratios relate to an entity’s financial situation compared with that of its industry:

	The Entity	Industry Average
Return on assets (ROA)	7.9%	9.2%
Return on equity (ROE)	15.2%	12.9%

What conclusion could a financial analyst validly draw from these ratios?

- A.The entity’s product has a high market share, leading to higher profitability.
- B.The entity uses more debt than does the average entity in the industry.
- C.The entity’s profits are increasing over time.
- D.The entity’s shares have a higher market value to carrying amount than does the rest of the industry.

Answer (B) is correct.

The use of financial leverage has a multiplier effect on the return on assets. The extended DuPont formula illustrates this point by showing that the return on equity equals the return on assets times the equity multiplier (total assets ÷ ordinary equity). Thus, greater use of debt increases the equity multiplier and the return on equity. In this example, the equity multiplier is 1.92 (15.2% ROE ÷ 7.9%

ROA), and the industry average is 1.40 (12.9% ROE ÷ 9.2% ROA). The higher equity multiplier indicates that the entity uses more debt than the industry average.

A.The question gave no information about market share.

C.This comparison is with an industry average, not over time.

D.Share valuation is a response to many factors. The higher-than-average return on equity does not mean that the entity has a more favorable market-to-carrying-amount ratio.

84.Fact Pattern: An entity's financial statements for the current year are presented below:

Statement of Financial Position		Statement of Income and Retained Earnings	
Cash	US \$100	Sales	US \$3,000
Accounts receivable	200	Cost of goods sold	(1,600)
Inventory	50	Gross profit	\$1,400
Net fixed assets	600	Operations expenses	(970)
Total assets	<u>US \$950</u>	Operating income	\$ 430
Accounts payable	US \$140	Interest expense	(30)
Long-term debt	300	Income before tax	\$ 400
Share capital	260	Income tax	(200)
Retained earnings	250	Net income	\$ 200
Total liabilities and equity	<u>US \$950</u>	Plus: Jan. 1 retained earnings	150
		Minus: Dividends	(100)
		Dec. 31 retained earnings	<u>US \$ 250</u>

The entity has return on assets of

A.21.1%

B.39.2%

C.42.1%

D.45.3%

Answer (A) is correct.

The return on assets is the ratio of profit to total assets. It equals 21.1% (US \$200 profit ÷ \$950 total assets).

B.The ratio of profit to ordinary equity is 39.2%

C.The ratio of profit before tax to total assets is 42.1%.

D.The ratio of profit before tax to total assets is 42.1%.

85.Fact Pattern: At the end of the accounting period, an entity has the partially completed financial statements shown as follows.

Income Statement:	
Sales	
Cost of goods sold	
Gross profit	
Administrative expense	US \$ 40,000
Depreciation expense	50,000
Earnings before interest and tax	
Interest expense	100,000
Earnings before tax	166,667
Tax expense	
Net income	100,000
Statement of Financial Position:	
Current assets	
Other assets	300,000
Total assets	
Current liabilities	
Long-term debt	1,000,000
Equity	
Total liabilities and equity	
Additional Information:	
Gross profit percentage = 30%	
Return on total assets = 3%	
Working capital = US \$2,000,000	

The entity had sales for the period of

- A. US \$891,667
- B. US \$1,188,890
- C. US \$888,890
- D. US \$107,000

Answer (B) is correct.

Gross profit equals 30% of sales. Thus, dividing gross profit by 30% yields sales. Gross profit = \$166,667 earnings before tax + \$100,000 interest expense + \$50,000 depreciation expense + \$40,000 administrative expense = \$356,667. Sales is therefore US \$1,118,890 (\$356,667 gross profit ÷ 30% gross profit rate).

- A. Improperly using a gross profit percentage of 40% results in US \$891,667.
- C. Dividing EBIT by 30% results in US \$888,890.
- D. Multiplying gross profit by 30% results in US \$107,000.

86.Fact Pattern: At the end of the accounting period, an entity has the partially completed financial statements shown as follows.

Income Statement:	
Sales	
Cost of goods sold	
Gross profit	
Administrative expense	US \$ 40,000
Depreciation expense	50,000
Earnings before interest and tax	
Interest expense	100,000
Earnings before tax	166,667
Tax expense	
Net income	100,000
Statement of Financial Position:	
Current assets	
Other assets	300,000
Total assets	
Current liabilities	
Long-term debt	1,000,000
Equity	
Total liabilities and equity	
Additional Information:	
Gross profit percentage = 30%	
Return on total assets = 3%	
Working capital = US \$2,000,000	

The entity has current assets of

- A. US \$3,033,333
- B. US \$3,633,333
- C. US \$3,333,333
- D. US \$1,000,000

Answer (A) is correct.

Return on total assets (3%) equals net income (US \$100,000) divided by total assets. Consequently, total assets equal US \$3,333,333 ($\$100,000 \div .03$). Current assets must therefore equal US \$3,033,333 ($\$3,333,333$ total assets – $\$300,000$ other assets).

B. The sum of total and other assets is US \$3,633,333.

C. Total assets equal US \$3,333,333.

D. Improperly calculating current assets as working capital minus long-term debt results in US \$1,000,000.

87. Entity A has 50,000 common shares and 10,000 preferred shares outstanding at the start of the year on January 1. The preferred shares are entitled to a US \$2 per share annual cash dividend, payable on December 31. The entity had net income of US \$150,000 for the year. On April 1, the entity issued 15,000 additional common shares for cash.

Entity B is identical to entity A in all respects except that it had 75,000 common shares outstanding for the entire year.

Basic earnings per share for entity B is approximately

- A.US \$1.73
- B.US \$1.87
- C.US \$2.00
- D.US \$2.27

Answer (A) is correct.

BEPS equals net income minus preferred dividends, divided by common shares outstanding. Thus, BEPS equals US \$1.73 $\{[\$150,000 - (10,000 \text{ preferred shares} \times \$2)] \div 75,000 \text{ common shares}\}$.

- B.Improperly assuming the preferred dividend is US \$1 results in US \$1.87.
- C.Failing to subtract preferred dividends from net income results in US \$2.00.
- D.Adding the preferred dividends to net income results in US \$2.27.

88.An entity had 300,000 shares of common shares issued and outstanding at December 31, Year 1. No shares were issued during Year 2. On January 1, Year 2, the entity issued 200,000 shares of nonconvertible preferred shares. During Year 2, the entity declared and paid US \$75,000 of cash dividends on the common shares and US \$60,000 on the preferred shares. Profit for the year ended December 31, Year 2, was US \$330,000. What is the entity's Year 2 basic earnings per share?

- A.US \$1.10
- B.US \$0.90
- C.US \$0.85
- D.US \$0.65

Answer (B) is correct.

BEPS is equal to the amount of net income or loss attributable to common equity holders divided by the weighted-average number of common shares outstanding during the year. To calculate the numerator, dividends on cumulative preferred shares must be subtracted from net income or loss whether or not the dividends were declared (US \$330,000 – \$60,000 = \$270,000). Earnings per share for Year 2 thus amounted to US \$0.90 ($\$270,000 \div 300,000$ weighted-average common shares outstanding).

- A.Improperly leaving preferred dividends in the numerator results in US \$1.10

C.Improperly subtracting the common, rather than the preferred, dividends from the numerator results in US \$0.85.

D.Improperly subtracting all dividends from the numerator results in US \$0.65.

89.Fact Pattern: An entity's financial statements for the current year are presented below:

<u>Statement of Financial Position</u>		<u>Statement of Income and Retained Earnings</u>	
Cash	US \$100	Sales	US \$3,000
Accounts receivable	200	Cost of goods sold	(1,600)
Inventory	50	Gross profit	\$1,400
Net fixed assets	600	Operations expenses	(970)
Total assets	<u>US \$950</u>	Operating income	\$ 430
Accounts payable	US \$140	Interest expense	(30)
Long-term debt	300	Income before tax	\$ 400
Share capital	260	Income tax	(200)
Retained earnings	250	Net income	\$ 200
Total liabilities and equity	<u>US \$950</u>	Plus: Jan. 1 retained earnings	150
		Minus: Dividends	(100)
		Dec. 31 retained earnings	<u>US \$ 250</u>

Q.The entity has a dividend-payout ratio of

A.19.6%

B.28.6%

C.40.0%

D.50.0%

Answer (D) is correct.

The dividend-payout ratio is the ratio of dividends paid to profit for the period. Hence, it equals 50.0% (US \$100 dividends ÷ \$200 net income).

A.The ratio of dividends paid to the December 31 carrying amount of ordinary equity is 19.6%.

B.The ratio of dividends paid to the sum of beginning retained earnings and profit is 28.6%.

C.The ratio of dividends paid to the December 31 retained earnings is 40.0%.

90.Fact Pattern: An entity reports the following account balances at year end:

Account	Balance
Long-term debt	US \$200,000
Cash	50,000
Net sales	600,000
Fixed assets (net)	320,000
Tax expense	67,500
Inventory	25,000
Common stock	100,000
Interest expense	20,000
Administrative expense	35,000
Retained earnings	150,000
Accounts payable	65,000
Accounts receivable	120,000
Cost of goods sold	400,000
Depreciation expense	10,000

Additional Information:
The opening balance of common stock was US \$100,000.
The opening balance of retained earnings was US \$82,500.
The entity had 10,000 common stock outstanding all year.
No dividends were paid during the year.

At year end, the entity has a book value per share of

- A. US \$10.00
- B. US \$15.00
- C. US \$21.63
- D. US \$25.00

Answer (D) is correct.

Book value per share, based on amounts drawn from the statement of financial position, measures the per share amount that would be received if the entity were liquidated. The book value per share for this entity at year end is US \$25 [(\$100,000 ordinary equity + \$150,000 retained earnings) ÷ 10,000 ordinary shares outstanding at year end].

- A. Excluding retained earnings from the numerator results in US \$10.00.
- B. Excluding ordinary shares from the numerator results in US \$15.00.
- C. Using average equity results in US \$21.63.

91. Fact Pattern: Presented below are partial year-end financial statement data for entities A and B.

	A	B
Cash	US \$100	US \$200
Accounts receivable	unknown	100
Inventories	unknown	100
Net fixed assets	200	100
Accounts payable	100	50
Long-term debt	200	50
Common stock	100	200
Retained earnings	150	100
	<u>A</u>	<u>B</u>
Sales	US \$600	US \$5,800
Cost of goods sold	300	5,000
Administrative expenses	100	500
Depreciation expense	100	100
Interest expense	20	10
Income tax expense	40	95
Net income	40	95

If A has 60 common shares outstanding, it has a book value per share of approximately

- A. US \$1.67
- B. US \$2.50
- C. US \$4.17
- D. US \$5.00

Answer (C) is correct.

The book value per share for A equals the sum of common shares and retained earnings, divided by the number of shares, or US \$4.17 $[(\$100 + \$150) \div 60]$.

- A. If retained earnings is omitted from the numerator, the result is US \$1.67.
- B. If the amount of common shares is omitted from the numerator, the result is US \$2.50.
- D. The book value per share for B is US \$5.00.

92. An entity has 100,000 outstanding common shares with a market value of US \$20 per share. Dividends of US \$2 per share were paid in the current year, and the entity has a dividend-payout ratio of 40%. The price-to-earnings (P-E) ratio of the entity is

- A. 2.5
- B. 4
- C. 10
- D. 50

Answer (B) is correct.

The P-E ratio equals the share price divided by EPS. If the dividends per share equaled US \$2 and the dividend-payout ratio was 40%, EPS must have been US \$5 ($\$2 \div .4$). Accordingly, the P-E ratio is 4 (US \$20 share price \div \$5 EPS).

- A. EPS divided by dividends per share equals 2.5.
- C. Share price divided by dividends per share equals 10.
- D. Price per share divided by the dividend-payout percentage equals 50.

93.Fact Pattern: An entity at year end has:

Sales	US \$500,000
Cost of goods sold	250,000
General and administrative expense	25,000
Interest expense	40,000
Depreciation expense	100,000
Tax rate	50%
Dividend payout ratio	25%

Q.The entity will pay dividends for the year of

- A.US \$10,625
- B.US \$21,250
- C.US \$23,125
- D.US \$42,500

Answer (A) is correct.

The entity has a dividend payout ratio of 25% of profit. Profit before taxes is US \$85,000 (\$500,000 sales – \$250,000 COGS – \$25,000 G&A expenses – \$40,000 interest expense – \$100,000 depreciation expense). Hence, after-tax profit is US \$42,500 [$\$85,000 \times (1.0 - 0.5)$], and the dividend payout is US \$10,625 ($\$42,500 \times 25\%$).

- B.Using a 50% dividend payout ratio instead of 25% results in US \$21,250.
- C.Calculating profit without subtracting the US \$100,000 depreciation expense results in US \$23,125
- D.The amount of US \$42,500 is the after-tax profit.

94.Fact Pattern: An entity at year end has:

Sales	US \$500,000
Cost of goods sold	250,000
General and administrative expense	25,000
Interest expense	40,000
Depreciation expense	100,000
Tax rate	50%
Dividend payout ratio	25%

What would be the effect of a lower tax rate on the ending balance of common stock and on dividends paid for the year?

	Ending Balance of Common Stock	Dividends Paid
A.	Increase	Increase
B.	Decrease	Decrease
C.	No effect	Increase
D.	No effect	Decrease

Answer (C) is correct.

The balance of common stock represents share capital, i.e., capital contributed by owners, not earnings retained in the business. It is not affected by a change in tax rate. Dividends will increase, however, because they are a constant percentage of after-tax earnings.

- A. Common stock is not affected.
- B. Common stock is not affected, and dividends will increase.
- D. Dividends will increase.

95. When comparing two companies, if all else is equal, the company that has a higher dividend payout ratio will have a

- A. Higher marginal cost of capital.
- B. Lower debt ratio.
- C. Higher investment opportunity schedule.
- D. Higher price-to-earnings ratio.

Answer (A) is correct.

A higher dividend payout ratio indicates that the firm is paying out a proportionally greater amount of its earnings rather than reinvesting them in the business. Since internally generated capital is the cheapest form of capital, other more costly forms will have to be used as retained earnings are depleted.

- B. The elements of the dividend payout ratio do not affect and are not affected by the elements of the debt ratio.
- C. The investment opportunity schedule is not affected by the elements of the dividend payout ratio.
- D. The dividend payout ratio is yearly dividend per share divided by earnings per share. As dividend per share is the numerator of the dividends payout ratio, an increase in the dividend per share would result in an increased payout ratio. Since earnings per share is the denominator of the price-to-earnings

ratio, the earnings per share of the company would remain unaffected in this scenario. The price-to-earnings ratio would remain unaffected as well.

96. Which group of ratios would be useful in evaluating the effectiveness of working capital management?

- A. Profit margin, acid-test ratio, and return on assets.
- B. Acid-test ratio, inventory turnover ratio, and average collection period ratio.
- C. Inventory turnover ratio, times interest earned, and debt-to-equity ratio.
- D. Acid-test ratio, current ratio, and return on equity.

Answer (B) is correct.

Working capital equals current assets minus current liabilities. The acid-test ratio equals quick assets (current assets – inventory – prepaid expenses) divided by current liabilities. Inventory (a current asset) turnover equals cost of goods sold divided by average inventory. The average collection period (number of days' sales in accounts receivable, a current asset) equals the number of days in a year divided by the accounts receivable turnover (net credit sales ÷ average receivables). The foregoing are some of the many ratios that can be used to evaluate working capital management.

- A. Profit margin and return on assets are measures of the management of all assets.
- C. Times interest earned and the debt-to-equity ratio are measures of capital structure management.
- D. Return on equity is a measure of capital structure management.

97. An entity has total asset turnover of 3.5 times and a total debt to total assets ratio of 70%. If the entity has total debt of US \$1,000,000, it has a sales level of

- A. US \$5,000,000
- B. US \$2,450,000
- C. US \$408,163
- D. US \$200,000

Answer (A) is correct.

If the debt-to-total assets ratio is 70% and debt is US \$1,000,000, total assets must be US \$1,428,571 ($\$1,000,000 \div 0.7$). Given total asset turnover (sales ÷ total assets) of 3.5, sales must be US \$5,000,000 ($\$1,428,571 \times 3.5$).

B.If total assets is calculated as total debt multiplied by 0.7, the result is US \$2,450,000.

C.If sales is determined by dividing total assets by 3.5, the result is US \$408,163.

D.Calculating total assets as total debt multiplied by 0.7 and sales as total assets divided by 3.5 results in US \$200,000.

98.Which of the following is true about the impact of price inflation on financial ratio analysis?

A.Inflation has no impact on financial ratio analysis.

B.Inflation affects financial ratio analysis for one entity over time but not comparative analysis of entities of different ages.

C.Inflation affects financial ratio analysis for one entity over time, as well as comparative analysis of entities of different ages.

D.Inflation affects comparative analysis of entities of different ages but not financial ratio analysis for one entity over time.

Answer (C) is correct.

Inflation is the decrease over time of the purchasing power of money. Because statement of financial position amounts are expressed in terms of money, historical cost amounts for different periods are measured in units representing different levels of purchasing power. Net income or loss is also distorted because of inflation's effect on depreciation expense and inventory costs. Inflation therefore impairs the comparability of financial statement items, whether for the same entity over time or for entities of differing ages.

A.Inflation distorts statements of financial position, depreciation charges, inventory costs, and profits.

B.Inflation affects any financial ratio analysis involving comparisons of prior-period with current-period monetary amounts.

D.Inflation affects any financial ratio analysis involving comparisons of prior-period with current-period monetary amounts.

99.All else being equal, an entity with a higher dividend-payout ratio will have a <List A> debt-to-assets ratio and a <List B> current ratio.

	List A	List B
A.	Higher	Higher
B.	Higher	Lower
C.	Lower	Higher
D.	Lower	Lower

Answer (B) is correct.

An entity with a higher dividend-payout ratio is distributing more of its earnings as dividends to ordinary shareholders. It will have less cash and less total assets than a comparable entity with a lower payout ratio. The debt-to-assets ratio will be higher because total assets are lower, and the current ratio will be lower because cash is lower.

- A. The current ratio will be lower.
- C. The debt-to-assets ratio will be higher, and the current ratio will be lower.
- D. The debt-to-assets ratio will be higher.

100. Which of the following financial statement analyses is most useful in determining whether the various expenses of a given entity are higher or lower than industry averages?

- A. Horizontal.
- B. Vertical.
- C. Activity ratio.
- D. Defensive-interval ratio.

Answer (B) is correct.

Vertical analysis is the expression of each item on a financial statement in a given period in relation to a base amount. On the income statement, each item is stated as a percentage of sales. Thus, the percentages for the entity in question can be compared with industry norms.

- A. A horizontal analysis indicates the proportionate change over a period of time and is useful in trend analysis of an individual entity.
- C. Activity ratio analysis includes the preparation of turnover ratios such as those for receivables, inventory, and total assets.
- D. The defensive-interval ratio is part of a liquidity analysis.

PART 3 UNIT 11

Question: 1 Why would an entity maintain a compensating cash balance?

- A. To make routine payments and collections.
- B. To pay for banking services.
- C. To provide a reserve in case of unforeseen fluctuations in cash flows.
- D. To take advantage of bargain purchase opportunities that may arise.

Answer (B) is correct.

The compensating cash balance is the money left in a checking account in the bank in order to compensate the bank for services it provides.

A . The cash balance maintained for making routine payments and collections is called the transactions balance.

C . The cash balance maintained as a reserve for unforeseen cash flow fluctuations is called the precautionary balance.

D . It is the speculative cash balance that is maintained in order to enable the entity to take advantage of any bargain purchase opportunities that may arise.

Question: 2 A lockbox system

- A. Reduces the need for compensating balances.
- B. Provides security for late night deposits.
- C. Reduces the risk of having checks lost in the mail.
- D. Accelerates the inflow of funds.

Answer (D) is correct.

A lockbox system is one strategy for expediting the receipt of funds. Customers submit their payments to a mailbox controlled by the bank rather than to the company's offices. Bank personnel remove the envelopes from the mailbox and deposit the checks to the company's account immediately. The remittance advices must then be transported to the company for entry into the accounts receivable system. The bank generally charges a flat monthly fee for this service.

A . A lockbox system is not related to compensating balances; a compensating balance may be required by a covenant in a loan agreement that requires a company to maintain a specified balance during the term of the loan.

B . A lockbox system is a process by which payments are sent to a bank's mailbox, which is checked during normal post office hours.

C . The use of a lockbox system entails sending checks through the mail to a post office box. Thus, it does not reduce the risk of losing checks in the mail.

Question: 3 Which of the following effects would a lockbox most likely provide for receivables management?

- A. Minimized collection float.
- B. Maximized collection float.
- C. Minimized disbursement float.
- D. Maximized disbursement float.

Answer (A) is correct.

Lockboxes are firm-maintained mailboxes, often throughout the country, that are checked by banks several times a day. Any funds received are immediately deposited into the firm's account, which hastens the availability of the funds by bypassing the firm's accounting department and reducing time in the postal system. All of this combines to minimize the collection float time.

B . Lockboxes minimize the float time via more immediate collections and deposits.

C . Minimizing disbursement float is not a function of lockboxes. They address collection, not disbursement times.

D . Maximizing disbursement float is not a function of lockboxes. They address collection, not disbursement times.

Question: 4 The working capital financing policy that subjects the firm to the greatest risk of being unable to meet the firm's maturing obligations is the policy that finances

- A. Fluctuating current assets with long-term debt.
- B. Permanent current assets with long-term debt.
- C. Permanent current assets with short-term debt.
- D. Fluctuating current assets with short-term debt.

Answer (C) is correct.

Financing permanent current assets with short-term debt is a risky strategy because the assets might not be liquidated in time to pay off the debt at maturity.

- A . Financing working capital needs from long-term debt sources is not particularly risky.
- B . Financing working capital needs from long-term debt sources is not particularly risky.
- D . Financing fluctuating current assets with short-term debt is not as risky as financing permanent current assets with short-term debt.

Question: 5 Which one of the following provides a spontaneous source of financing for a firm?

- A. Accounts payable.
- B. Mortgage bonds.
- C. Accounts receivable.
- D. Debentures.

Answer (A) is correct.

Trade credit is a spontaneous source of financing because it arises automatically as part of a purchase transaction. Because of its ease in use, trade credit is the largest source of short-term financing for many firms, both large and small.

- B . Mortgage bonds and debentures do not arise automatically as a result of a purchase transaction.
- C . The use of receivables as a financing source requires an extensive factoring arrangement and often involves the creditor's evaluation of the credit ratings of the borrower's customers.
- D . Mortgage bonds and debentures do not arise automatically as a result of a purchase transaction.

Question: 6 Net working capital is the difference between

- A. Current assets and current liabilities.
- B. Fixed assets and fixed liabilities.
- C. Total assets and total liabilities.
- D. Shareholders' investment and cash.

Answer (A) is correct.

Net working capital is defined by accountants as the difference between current assets and current liabilities. Working capital is a measure of liquidity.

- B . Working capital refers to the difference between current assets and current liabilities; fixed assets are not a component.

C . Total assets and total liabilities are not components of working capital; only current items are included.

D . Shareholders' equity is not a component of working capital; only current items are included in the concept of working capital.

Question: 7 As a company becomes more conservative in its working capital policy, it tends to have a(n)

- A. Decrease in its acid-test ratio.
- B. Increase in the ratio of current liabilities to noncurrent liabilities.
- C. Increase in the ratio of current assets to current liabilities.
- D. Increase in funds invested in common stock and a decrease in funds invested in marketable securities.

Answer (C) is correct.

A conservative working capital policy minimizes liquidity risk by increasing net working capital (current assets – current liabilities). The result is that the company forgoes the potentially higher returns available from using the additional working capital to acquire long-term assets. A conservative working capital policy is characterized by a higher current ratio (current assets ÷ current liabilities) and acid-test ratio (quick assets ÷ current liabilities). Thus, the company will increase current assets or decrease current liabilities. A conservative policy finances assets using long-term or permanent funds rather than short-term sources.

A . A decrease in the acid-test ratio suggests an aggressive policy. A conservative company wants a higher acid-test ratio, that is, more liquid assets relative to liabilities.

B . A conservative company wants working capital to be financed from long-term sources.

D . A conservative company seeks more liquid (marketable) investments.

Question: 8 A working capital method that delays the outflow of cash is

- A. Factoring.
- B. A draft.
- C. A lockbox system.
- D. Electronic funds transfer.

Answer (B) is correct.

A draft is a three-party instrument in which one person (the drawer) orders a second person (the drawee) to pay money to a third person (the payee). A check is the most common form of draft. It is an instrument payable on demand in which the drawee is a bank. Consequently, a draft can be used to delay the outflow of cash. A draft can be dated on the due date of an invoice and will not be processed by the drawee until that date, thereby eliminating the necessity of writing a check earlier than the due date or using an EFT. Thus, the outflow is delayed until the check clears the drawee bank.

A . Factoring is the sale of receivables and therefore concerns cash inflows, not outflows.

B . A lockbox system is a means of accelerating cash inflows.

C . An electronic funds transfer results in an immediate deduction from the payor's bank account, thereby eliminating float.

Question: 9 The average collection period for a firm measures the number of days

A. After a typical credit sale is made until the firm receives the payment.

B. For a typical check to "clear" through the banking system.

C. Beyond the end of the credit period before a typical customer payment is received.

D. Before a typical account becomes delinquent.

Answer (A) is correct.

The average collection period measures the number of days between the date of sale and the date of collection. It should be related to a firm's credit terms. For example, a firm that allows terms of 2/15, net 30, should have an average collection period of somewhere between 15 and 30 days.

B . It describes the concept of float.

C . The average collection period includes the total time before a payment is received, including the periods both before and after the end of the normal credit period.

D . It describes the normal credit period.

Question: 10 An aging of accounts receivable measures the

A. Ability of the firm to meet short-term obligations.

B. Average length of time that receivables have been outstanding.

C. Percentage of sales that have been collected after a given time period.

D. Amount of receivables that have been outstanding for given lengths of time.

Answer (D) is correct.

The purpose of an aging of receivables is to classify receivables by due date. Those that are current (not past due) are listed in one column, those less than 30 days past due in another column, etc. The amount in each category can then be multiplied by an estimated bad debt percentage that is based on a company's credit experience and other factors. The theory is that the oldest receivables are the least likely to be collectible. Aging the receivables and estimating the uncollectible amounts is one method of arriving at the appropriate balance sheet valuation of the accounts receivable account.

- A . An aging schedule is used for receivables, not liabilities.
- B . An aging schedule concerns specific accounts, not averages.
- C . An aging schedule focuses on uncollected receivables.

Question: 11 Consider the following factors affecting a company as it is reviewing its trade credit policy.

1. Operating at full capacity.
2. Low cost of borrowing.
3. Opportunity for repeat sales.
4. Low gross margin per unit.

Which of the above factors would indicate that the company should liberalize its credit policy?

- A. 1 and 2 only.
- B. 1, 2, and 3 only.
- C. 2 and 3 only.
- D. 3 and 4 only.

Answer (C) is correct.

If the cost of borrowing is low, the firm can satisfy its working capital needs otherwise than by encouraging early payment from customers. Also, loosening credit policies tends to increase repeat sales.

- A . If the firm is operating at full capacity, it is selling all it can produce and has no need to loosen its credit policies.
- B . If the firm is operating at full capacity, it is selling all it can produce and has no need to loosen its credit policies.
- D . If the gross margin per unit is low, greater sales will not significantly improve the firm's profits.

Question: 12 Aaron Co's vendor will be offering discounts next year. Which of the following credit terms offered by the vendor is most beneficial to Aaron?

- A. 2/10, net 60.
- B. 3/15, net 30.
- C. 5/20, net 45.
- D. 5/20, net 60.

Answer (D) is correct.

Credit terms are expressed in these terms: "Discount percentage"/ "Pay by date to receive discount rate," net "Balance must be paid by date." The term 5/20, net 60 means that the customer may either (1) subtract 5% of the invoice amount if it is paid within 20 days or (2) pay the entire balance by the 60th day. This credit term offers the greatest discount percentage and longest payment period among the four options. Thus, 5/20, net 60 is the best choice.

A . This credit term means the customer may either (1) subtract 2% of the invoice amount if it is paid within 10 days or (2) pay the entire balance by the 60th day.

B . This credit term means the customer may either (1) subtract 3% of the invoice amount if it is paid within 15 days or (2) pay the entire balance by the 30th day.

C .This credit term means the customer may either (1) subtract 5% of the invoice amount if it is paid within 20 days or (2) pay the entire balance by the 45th day.

Question: 13 An organization would usually offer credit terms of 2/10, net 30 when

- A. The organization can borrow funds at a rate exceeding the annual interest cost.
- B. The organization can borrow funds at a rate less than the annual interest cost.
- C. The cost of capital approaches the prime rate.
- D. Most competitors are offering the same terms, and the organization has a shortage of cash.

Answer (D) is correct.

Because these terms involve an annual interest cost of over 36%, a company would not offer them unless it desperately needed cash. Also, credit terms are typically somewhat standardized within an industry. Thus, if most companies in the industry offer similar terms, a firm will likely be forced to match the competition or lose market share.

A . If the company does not need cash, it would not offer cash discounts, regardless of its cost of capital, unless required to match competition.

B . The ability to borrow at a lower rate is a reason for not offering cash discounts.

C . The relationship between the cost of capital and the prime rate may not be relevant if the firm cannot borrow at the prime rate.

Question: 14 The main reason that a firm would strive to reduce the number of days sales outstanding is to increase

A. Accounts receivable.

B. Cash.

C. Cost of goods sold.

D. Contribution margin.

Answer (B) is correct.

A low days sales outstanding value means that it takes a company fewer days to collect accounts receivables. A company that collects accounts receivables quickly will have an increase in cash.

A . A low days sales outstanding value means that it takes a company fewer days to collect accounts receivables. Thus, accounts receivables will decrease, not increase.

C . Days sales outstanding is a measure of the average number of days that it takes for a company to collect revenue after a sale has been made. Cost of goods sold is not used in the calculation of days sales outstanding.

D . Days sales outstanding is a measure of the average number of days that it takes for a company to collect revenue after a sale has been made. Contribution margin is not used in the calculation of days sales outstanding.

Question: 15 A retail company analyst is comparing North Company to South Company. The analyst notes that receivables for both companies' private label credit cards have significantly increased balances in the current year. North's customers' monthly payment averaged 15% of their balances, while South's customers' monthly payment averaged 22% of their balances. What should the analyst conclude?

A. North's customers may be having a harder time paying down their credit card debt than South's customers.

B. South Company has likely increased its prices higher than North Company.

C. Both North Company and South Company have increased their prices in the current period; however, South Company has a higher gross margin than North Company.

D. North Company sells more high-volume, low-margin goods than South Company.

Answer (A) is correct.

North's customers are paying back 7% less of their balances on average. Thus, it seems they are having a harder time paying it off.

B . Since South has a higher percentage getting paid off, it is more likely that their prices are lower than North's.

C . A higher gross margin does not indicate that more of their credit card balances would be paid off.

D . High-volume, low-margin goods are easier to pay off and would likely represent a higher balance payoff.

Question: 16 An established firm sells computer hardware, software, and services. The firm is considering a change in its credit policy. It has been determined that such a change would not change the payment patterns of the current customers. To determine whether such a change would be beneficial, the firm has identified the proposed new credit terms, the expected additional sales, the expected contribution margin on the sales, the expected bad debt losses, and the investment in additional receivables and the period of the investment. What additional information, if any, does the firm require to determine the profitability of the proposed new policy as compared to the current credit policy?

A. The credit standards that presently exist.

B. The new credit standards.

C. The opportunity cost of funds.

D. No additional information is needed.

Answer (C) is correct.

Opportunity cost is the maximum benefit forgone by choosing an investment. Thus, the missing relevant information is the best alternative return on the funds to be invested in receivables.

A . The firm can determine the profitability of the current policy without regard to the credit standards.

B . The new credit terms are known. The standards underlying them are irrelevant.

D . The firm needs to know the opportunity cost of funds.

Question: 17 A firm is changing its credit terms from net 30 to 2/10, net 30. The least likely effect of this change would be a(n)

A. Increase in sales.

B. Shortening of the cash conversion cycle.

- C. Increase in short-term borrowings.
- D. Lower number of days' sales outstanding.

Answer (C) is correct.

Changing its credit terms to encourage earlier payment by customers increases the firm's cash flow and decreases the need for short-term borrowing.

- A . With a choice of credit terms, more customers are likely to buy.
- B . Encouraging customers to pay earlier shortens the cash conversion cycle.
- D . Encouraging customers to pay earlier decreases the number of days' sales outstanding.

Question: 18 A company had total sales of US \$500,000 in the first quarter of the year, which was the same amount as it recorded in the first quarter of the prior year. However, its accounts receivable balance increased from US \$230,000 last year to US \$300,000 this year. Which one of the following is the most likely explanation for the increase in the accounts receivable balance?

- A. The company initiated the use of factoring in the current year.
- B. The company shortened its payment terms in the current year from 60 days to 30 days.
- C. The company discontinued the use of factoring in the current year.
- D. The company hired more people in its credit and collections department.

Answer (C) is correct.

Factoring is a transfer of receivables to a third party (a factor) who assumes the responsibility of collection. The factor often operates more efficiently than its clients because of the specialized nature of its services. If the company stopped selling accounts receivable to the factor, there would be more accounts receivable in the current year.

- A . If the company started to use factoring, the current year's accounts receivable would be less than the prior year's.
- B . Changes in payment terms do not affect accounts receivable balance.
- D . Hiring more people in the credit and collections department would not reduce the accounts receivable balance.

Question: 19 With regard to inventory management, an increase in the frequency of ordering will normally

- A. Reduce the total ordering costs.

- B. Have no impact on total ordering costs.
- C. Reduce total carrying costs.
- D. Have no impact on total carrying costs.

Answer (C) is correct.

If orders are placed more frequently, fewer items are carried and carrying costs fall.

A . Ordering costs are the fixed costs of placing an order with a vendor and receiving the goods. Consequently, an increase in the frequency of ordering will normally increase total ordering costs.

B . Total ordering costs will increase.

D . Total carrying costs are reduced.

Question: 20 An entity sells 1,500 units of a particular item each year and orders the items in equal quantities of 500 units at a price of US \$5 per unit, resulting in an average inventory of 250 units. No safety stocks are held. If the entity has a cost of capital of 12%, its annual opportunity cost of carrying inventory is

- A. US \$150
- B. US \$180
- C. US \$300
- D. US \$900

Answer (A) is correct.

The annual opportunity cost of carrying inventory equals the average inventory level, times the per-unit purchase price, times the cost of capital. The average inventory level is the order quantity divided by 2. Thus, the annual opportunity cost of carrying inventory is US \$150 $[(500 \text{ units} \div 2) \times \$5 \times .12]$.

B . A US \$180 cost is obtained by using the total annual quantity rather than the average inventory level and by not multiplying by the unit price.

C . A US \$300 cost is obtained by using the order size rather than the average inventory level.

D . A US \$900 cost is based on the total annual quantity rather than the average inventory level.

Question: 21 When the economic order quantity (EOQ) decision model is employed, the <List A> are being offset or balanced by the <List B>.

	<u>List A</u>	<u>List B</u>
A.	Ordering costs	Carrying costs
B.	Purchase costs	Carrying costs
C.	Purchase costs	Quality costs
D.	Ordering costs	Stockout costs

Answer (A) is correct.

The objective of the EOQ model is to find an optimal order quantity that balances carrying and ordering costs. Only variable costs should be considered. The EOQ is the point where the ordering cost and carrying cost curves intersect. It corresponds to the minimum point on the total inventory cost curve.

- B . The price (purchase costs) is not directly incorporated into the EOQ model.
- C . Neither the price nor quality costs are incorporated into the EOQ model.
- D . Stockout costs are not directly incorporated into the EOQ model.

Question: 22 Assuming other factors are constant, which action is the most appropriate when carrying costs of inventory are increasing significantly?

- A. Increase total orders.
- B. Decrease total orders.
- C. Decrease the use of inventory in the production process.
- D. Hire additional line managers.

Answer (A) is correct.

If smaller orders are placed more frequently, fewer items are carried, reducing the effect of increased carrying costs. But ordering costs increase.

- B . Decreasing orders increases inventory and carrying costs.
- C . Decreased use of inventory is not feasible if other factors (e.g., inputs) are assumed to be constant.
- D . Hiring additional line managers has no effect on inventory management.

Question: 23 An organization sells a product for which demand is certain and carrying costs are high. Management wants to minimize inventory costs. The organization should

- A. Keep a large safety stock.
- B. Use a just-in-time (JIT) inventory system.
- C. Use a materials requirements planning (MRP) system.
- D. Maintain a master production schedule.

Answer (B) is correct.

A JIT system reduces inventory on hand. Decreased inventory reduces the effect of increased carrying costs. Also, constant demand encourages small, equal shipments of inventory that occur when needed.

A . Safety stock is inventory maintained to reduce the number of stockouts resulting from higher-than-expected demand during lead time. Maintaining a large safety stock during periods of stable demand results in unnecessary carrying costs. Stockouts are less likely.

C . An MRP system schedules production and controls the level of inventory for components with dependent demand.

D . A master production schedule states the timing and amounts of production.

Question: 24 All of the following are elements included in the economic order quantity (EOQ) except

- A. Average level of inventory.
- B. Annual demand.
- C. Carrying cost.
- D. Variable cost per order.

Answer (A) is correct.

The basic EOQ formula minimizes the total of inventory carrying and ordering costs. It equals the square root of a fraction consisting of (1) a numerator equal to the product of twice the unit periodic demand and the variable cost per order and (2) a denominator equal to the unit periodic carrying cost. The average level of inventory is derived using the EOQ, but it is not a factor in the EOQ equation.

B . Annual demand is a factor in the EOQ equation.

C . Carrying cost is a factor in the EOQ equation.

D . Variable cost per order, or setup cost, is a factor in the basic EOQ equation.

Question: 25 An increase in inventory carrying costs

- A. Decreases the economic order quantity (EOQ).
- B. Increases the reorder point.
- C. Increases the economic order quantity (EOQ).
- D. Does not change the economic order quantity (EOQ).

Answer (A) is correct.

An increase in inventory carrying costs decreases the EOQ because, in the EOQ model, carrying cost is a denominator variable.

- B . The reorder point is based on lead time, not the EOQ model.
- C . The EOQ increases when inventory carrying costs decrease.
- D . Carrying cost is a variable in the EOQ formula. Therefore, a change in carrying cost will result in a change in the EOQ.

Question: 26 Which of the following is used in determining the economic order quantity (EOQ)?

- A. Regression analysis.
- B. Calculus.
- C. Markov process.
- D. Queuing theory.

Answer (B) is correct.

The primary business application of differential calculus is to identify the maxima or minima of curvilinear functions. In business and economics, these are the points of revenue or profit maximization (maxima) or cost minimization (minima). The EOQ results from differentiating the total cost with regard to order quantity.

- A . Regression analysis is used to fit a linear trend line to a dependent variable based on one or more independent variables.
- C . Markov process models are used to study the evolution of certain systems over repeated trials.
- D . Queuing theory is a waiting-line technique used to balance desirable service levels against the cost of providing more service.

Question: 27 The purpose of the economic order quantity model is to

- A. Minimize the safety stock.
- B. Minimize the sum of the order costs and the holding costs.
- C. Minimize the inventory quantities.
- D. Minimize the sum of the demand costs and the backlog costs.

Answer (B) is correct.

The purpose of the EOQ model is to minimize the sum of inventory order costs (or production setup) and holding (carrying) costs. The EOQ equals the square root of twice the annual demand multiplied by the variable cost per order, divided by the unit periodic holding cost.

- A . The basic EOQ model does not include safety stock.
- C . In the EOQ model, costs, not quantities, are to be minimized.
- D . Quantity demanded is a variable in the model, but order costs, not demand costs, are relevant. Backlogs are customer orders that cannot be filled immediately because of stockouts. Backlog costs are not quantified in the model.

Question: 28 One of the elements included in the economic order quantity (EOQ) formula is

- A. Safety stock.
- B. Yearly demand.
- C. Selling price of item.
- D. Lead time for delivery.

Answer (B) is correct.

The basic EOQ formula is used to minimize the total of inventory carrying and ordering costs. The basic EOQ equals the square root of a fraction consisting of a numerator equal to the product of twice the unit periodic demand and the variable cost per order and a denominator equal to the unit periodic carrying cost.

- A . The safety stock is not included in the basic EOQ formula.
- C . The selling price of the item is not included in the basic EOQ formula.
- D . The lead time for delivery is not included in the basic EOQ formula.

Question: 29 In an economic order quantity (EOQ) model, both the costs per order and the holding costs are estimates. If those estimates are varied to determine how much the changes affect the optimal EOQ, such an analysis would be called a

- A. Forecasting model.
- B. Sensitivity analysis.
- C. Critical path method analysis.
- D. Decision analysis.

Answer (B) is correct.

An economic order quantity (EOQ) sensitivity analysis varies the holding (carrying) costs per unit or the order costs to determine how the changes affect the optimal EOQ.

- A . Forecasting models project data over time or develop regression models when time series data are not available.
- C . The critical path method is used to control complex projects. The critical path is the longest path through a network of activities.
- D . Decision analysis selects the best option from alternatives.

Question: 30 A perpetual inventory system uses a minimum quantity on hand to initiate purchase ordering procedures for restocking. In reviewing the appropriateness of the minimum quantity level established by the stores department, the internal auditor is least likely to consider

- A. Stockout costs, including lost customers.
- B. Seasonal variations in forecasting inventory demand.
- C. The safety stock level.
- D. Available storage space and potential obsolescence.

Answer (C) is correct.

The basic economic order quantity (EOQ) model is based on the following variables: demand, variable cost per purchase order, and variable unit carrying cost. Although the level of safety stock does affect the EOQ, the safety stock only affects the EOQ indirectly. Therefore, it is the factor the internal auditor is least likely to consider.

- A . Stockout costs are directly affected by the quantity on hand.
- B . Seasonal variations in demand directly affect the minimum quantity available.
- D . Storage space and potential obsolescence directly affect stocking levels.

Question: 31 A decrease in inventory order costs will

- A. Decrease the economic order quantity.
- B. Increase the reorder point.
- C. Increase the economic order quantity.
- D. Decrease the holding cost percentage.

Answer (A) is correct.

A decrease in inventory ordering costs should decrease the economic order quantity. The effect is that more orders can be made (of smaller quantities) without increasing costs. Accordingly, in the EOQ model, ordering cost is a numerator value.

- B . The reorder point is based on lead time, not the EOQ model.
- C . The EOQ does not increase when inventory order costs decrease.
- D . The holding cost percentage will always be identical to the ordering cost percentage in accordance with the fundamental calculus underlying the EOQ model.

Question: 32 The EOQ (economic order quantity) model calculates the cost-minimizing quantity of a product to order, based on a constant annual demand, carrying costs per unit per annum, and cost per order. What is the EOQ if the annual demand for a product is 5,000 units, carrying costs are US \$1 per item per annum, and the cost of placing an order is US \$10?

- A. 316
- B. 447
- C. 483
- D. 500

Answer (A) is correct.
The EOQ formula is

$$X = \sqrt{\frac{2aD}{k}}$$

If: a = variable cost per order (or production setup)
D = periodic demand in units
k = unit periodic carrying cost

$$\sqrt{\frac{2 \times \text{US } \$10 \times 5,000}{\text{US } \$1}} = 316.23$$

- B . The EOQ is 447 when demand is 10,000 units per year.
- C . The EOQ of 483 results when annual demand is 11,664 units.
- D . The EOQ of 500 results when annual demand is 12,500 units.

Fact Pattern: Using an EOQ analysis (assuming a constant demand), it is determined that the optimal order quantity is 2,500. The company desires a safety stock of 500 units, which results in a total average inventory of 1,750 units. Annual inventory holding costs equal 25% of the average inventory. It costs the company US \$4 per unit to buy the product. It costs the company US \$150 to place a detailed order, and the annual demand for the product is 48,000 units.

Question: 33 Annual inventory holding costs equal

- A. US \$750
- B. US \$1,250
- C. US \$1,750
- D. US \$2,250

Answer (C) is correct.

Given that demand is constant and the EOQ is 2,500 units, the average inventory without regard to safety stock is 1,250 units (2,500 ÷ 2). Adding safety stock results in an average of 1,750 units (1,250 + 500). Given also that annual holding costs are 25% of average inventory and that unit cost is US \$4, total annual holding cost is US \$1,750 [(1,750 units × US \$4) × 25%].

- A . A US \$750 cost results from subtracting instead of adding the cost of holding safety stock.
- B . A US \$1,250 cost ignores safety stock.

D . A US \$2,250 cost results from double counting the cost of holding safety stock.

Fact Pattern: Using an EOQ analysis (assuming a constant demand), it is determined that the optimal order quantity is 2,500. The company desires a safety stock of 500 units, which results in a total average inventory of 1,750 units. Annual inventory holding costs equal 25% of the average inventory. It costs the company US \$4 per unit to buy the product. It costs the company US \$150 to place a detailed order, and the annual demand for the product is 48,000 units.

Question: 34 Total inventory ordering costs per year equal

- A. US \$1,250
- B. US \$2,400
- C. US \$2,880
- D. US \$3,600

Answer (C) is correct.

Total annual demand is 48,000 units. Total annual ordering costs therefore equal US \$2,880 [US \$150 cost per order \times (48,000 units \div 2,500 EOQ)].

- A . A US \$1,250 cost equals the annual holding cost of the average inventory excluding safety stock.
- B . A US \$2,400 cost assumes an EOQ of 3,000 units.
- D . A US \$3,600 cost assumes an EOQ of 2,000 units.

Question: 35 The economic order quantity, Q, is the size of the order that minimizes total inventory costs. These costs, which are composed of ordering and holding costs, can be computed using the following expression:

$$TC = \frac{Qs}{2} + \left(\frac{D}{Q}\right)p + F$$

If: TC = total inventory costs
 Q = size of each order
 D = annual demand in units
 F = fixed costs of ordering
 p = variable cost of placing one order
 s = holding (carrying) cost per year for one unit of inventory

The following inventory information is available for an organization:

Annual demand (D)	20,000 units
Variable cost of placing one order (p)	US \$100
Holding cost per unit (s)	\$1
Economic order quantity (Q)	2,000 units
Fixed cost of ordering	\$0

Using this information, what is the total inventory cost?

- A. US \$1,000
- B. US \$2,000
- C. US \$2,500
- D. US \$3,000

Answer (B) is correct.

When the order size is 2,000 units, the variable inventory costs are US \$2,000 $\{[(2,000 \text{ units} \times \$1) \div 2] + [(20,000 \text{ units} \div 2,000 \text{ units}) \times \$100]\}$.

- A . A total cost of US \$1,000 results from omitting order costs or holding costs from the calculation.
- C . A total cost of US \$2,500 results from an economic order quantity of 4,000 units.
- D . A total cost of US \$3,000 results from calculating the holding cost of maximum inventory rather than average inventory.

Question: 36 An organization's variable cost per order is US \$100 and its unit periodic carrying cost is US \$1. If the organization's annual demand is 12,800 units, how much are total inventory costs?

- A. US \$800
- B. US \$1,600
- C. US \$6,400
- D. US \$6,500

Answer (B) is correct.

When annual demand is 12,800 units, the EOQ is calculated as follows:

$$1,600 \text{ units} = \sqrt{(2 \times 12,800 \times \text{US } \$100) \div \$1}$$

Based on the EOQ, the total inventory cost is US \$1,600 $\{[(1,600 \text{ units} \times \$1) \div 2] + [(12,800 \text{ units} \div 1,600 \text{ units}) \times \$100]\}$.

- A . The amount of US \$800 results from omitting order costs or carrying costs from the calculation.
- C . The amount of US \$6,400 equals carrying costs with an EOQ of 12,800.
- D . The amount of US \$6,500 assumes ordering costs are US \$100.

Question: 37 Which one of the following would not be considered a carrying cost associated with inventory?

- A. Insurance costs.
- B. Cost of capital invested in the inventory.
- C. Cost of obsolescence.
- D. Shipping costs.

Answer (D) is correct.

Carrying costs are incurred to hold inventory. Examples include such costs as warehousing, insurance, the cost of capital invested in inventories, inventory taxes, and the cost of obsolescence and spoilage. Shipping costs and the initial cost of the inventory are the purchase costs.

- A . Insurance is a cost of carrying inventory.
- B . Obsolescence is a cost of carrying inventory.
- C . Obsolescence is a cost of carrying inventory.

Question: 38 The carrying costs associated with inventory management include

- A. Insurance costs, shipping costs, storage costs, and obsolescence.
- B. Storage costs, handling costs, capital invested, and obsolescence.
- C. Purchasing costs, shipping costs, set-up costs, and quantity discounts lost.
- D. Obsolescence, set-up costs, capital invested, and purchasing costs.

Answer (B) is correct.

Carrying costs include storage costs, handling costs, insurance costs, interest on capital invested, and obsolescence.

A . Shipping costs are ordering costs, not carrying costs.

C . It states various ordering (or manufacturing) costs.

D . The set-up costs for a production run are equivalent to ordering costs. Additionally, purchasing costs are considered costs of ordering.

Question: 39 The optimal level of inventory is affected by all of the following except the

A. Usage rate of inventory per time period.

B. Cost per unit of inventory.

C. Current level of inventory.

D. Cost of placing an order for merchandise.

Answer (C) is correct.

The optimal level of inventory is affected by the factors in the economic order quantity (EOQ) model and delivery or production lead times. These factors are the annual demand for inventory, the carrying cost, which includes the interest on funds invested in inventory, the usage rate, and the cost of placing an order or making a production run. The current level of inventory has nothing to do with the optimal inventory level.

A . The usage rate of inventory is a factor in determining how much inventory to carry.

B . The cost of inventory affects carrying costs and a firm wants to minimize its inventory carrying costs.

D . The cost of placing an order affects how often orders are placed. A firm wants to minimize its ordering costs.

Question: 40 Which of these inventory management techniques is the simplest?

A. Just-in-time.

B. Manufacturing resource planning.

C. ABC inventory management.

D. Materials requirements planning.

Answer (C) is correct.

The ABC system is a simple inventory management technique. It controls inventories by dividing items into three groups based on monetary value.

A . Just-in-time inventory management requires firm commitments from suppliers and very reliable delivery networks.

C . Manufacturing resource planning is extremely complex. It integrates all facets of a manufacturing business, including production, sales, inventories, schedules, and cash flows.

D . Materials requirements planning is an integrated computer-based system designed to plan and control materials used in production. It is a complex system.

Question: 41 A manufacturing firm has experienced a surge in demand for its products. The need to store steadily increasing supplies of raw materials has led the firm to rent warehouse space at an exorbitant cost. The most cost-effective inventory management technique for the company to improve its practices is most likely

- A. Economic order quantity.
- B. Electronic data interchange.
- C. ISO 9000.
- D. Just-in-time.

Answer (D) is correct.

Just-in-time inventory management views storing and handling inventory as nonvalue-added activities. The goal of just-in-time is to reduce the need for materials storage space by timing deliveries to arrive just as the materials are needed in production.

A . Instituting an economic order quantity system would not alleviate the increasing costs of storing raw materials.

B . Electronic data interchange may reduce the amount of paper exchanged by trading parties, but it would not help reduce the firm's rising storage costs.

C . The ISO 9000 set of standards addresses process quality, not inventory management.

Question: 42 Which of the following is not a characteristic of a just-in-time (JIT) inventory management system?

- A. JIT relies on good quality materials.
- B. JIT reorganizes the production process to eliminate waste of resources.
- C. The lower inventory in a JIT system eliminates the need for some internal controls.
- D. The number of suppliers is relatively large in a JIT system.

Answer (D) is correct.

In a JIT system, the dependability of suppliers is crucial. Organizations that adopt JIT systems therefore have strategic teaming agreements with a few, not many, carefully chosen suppliers who are extensively involved in the buyer's processes.

A . The focus of quality control under JIT changes from the discovery of defective parts to the prevention of quality problems. Zero machine breakdowns (achieved through preventive maintenance) and zero defects are ultimate goals. Because lower quality materials are more likely to be defective, JIT relies on good quality materials.

B . JIT reorganizes the production process to eliminate waste of resources. JIT is a pull system. Items are pulled through production by current demand, not pushed through by anticipated demand. Thus, one operation produces only what is needed by the next operation, and components and materials arrive just in time to be used.

C . The lower inventory in a JIT system eliminates the need for some internal controls. Frequent receipt of deliveries from suppliers often means less need for a sophisticated inventory control system and for control personnel.

Question: 43 Which statement about the ABC inventory system is true?

- A. Group C consists of high-monetary-value items, which account for a small portion of the total inventory usage.
- B. Group A consists of low-monetary-value items, which usually account for 70% of sales or usage.
- C. The stocking levels and activity of group A items are reviewed on a regular basis.
- D. Group B must be reviewed as often as group A items to allow inventory to be managed efficiently.

Answer (C) is correct.

The ABC system is a simple inventory management system. It controls inventories by dividing items into three groups. Group A consists of high-monetary-value items, which account for a small portion of the total inventory usage. Group B consists of medium-monetary-value items, which may account for 20% of the total inventory items. Group C consists of low-monetary-value items, which account for the remaining 70% of sales or usage. The ABC system permits inventory to be managed in the most cost-effective manner. The stocking levels and activity of group A items are reviewed on a regular basis.

- A . Group A consists of high-monetary-value items.
- B . Group C consists of consists of low-monetary-value items.
- D . Reviewing Group B items as often as Group A may not be efficient.

Question: 44 Just-in-time (JIT) inventory systems have been adopted by large manufacturers to minimize the carrying costs of inventories. A weakness of JIT systems is

- A. Increased production time.
- B. Increased carrying costs.
- C. Increased stockout costs.
- D. Increased purchase costs.

Answer (C) is correct.

JIT minimizes inventory by relying on coordination with suppliers to provide deliveries when they are needed for production. Consequently, inventory shortages are more likely. Thus, stockouts increase because the inventory buffer is reduced or eliminated.

- A . JIT systems allow continuous production when inventory is delivered as needed; bottlenecks should not arise even if inventory is eliminated.
- B . JIT systems significantly reduce and sometimes eliminate carrying costs.
- D . Assuming demand and purchase price are constant, purchase costs often remain the same in a JIT systems.

Question: 45 Which of the following best describes a comprehensive system that processes and monitors electronic transactions, communications, and business interactions?

- A. Electronic mail (email).
- B. Electronic funds transfer (EFT).
- C. Electronic data interchange (EDI).
- D. Electronic business (e-business).

Answer (D) is correct.

Electronic business (e-business) is broadly defined as all methods of conducting business electronically. E-business may occur via online transactions on public networks and email.

- A . Text or document files can be sent by email, but e-commerce is a comprehensive system not limited to email.
- B . Electronic funds transfer (EFT) is the transfer of money.
- C . Electronic data interchange is the transfer of documents between businesses.

Question: 46 A manufacturer is considering using bar code identification for recording information on parts used by the manufacturer. A reason to use bar codes rather than other means of identification is to ensure that

- A. The movement of all parts is recorded.
- B. The movement of parts is easily and quickly recorded.
- C. Vendors use the same part numbers.
- D. Vendors use the same identification methods.

Answer (B) is correct.

Bar code scanning is a form of optical character recognition. Bar codes are a series of bars of different widths that represent critical information about the item. They can be read and the information can be instantly recorded using a scanner. Thus, bar coding records the movement of parts with minimal labor costs.

- A . Any identification method may fail to record the movement of some parts.
- C . Each vendor has its own part-numbering scheme.
- D . Each vendor has its own identification method, although vendors in the same industry often cooperate to minimize the number of bar code systems they use.

Question: 47 An entity had the following account balances in the pre-closing trial balance:

Purchases	US \$400,000
Transportation-in	6,000
Purchase discounts	40,000
Purchase allowances	15,000
Returned purchases	5,000

The entity had net purchases for the period of

- A. US \$340,000
- B. US \$346,000
- C. US \$370,000
- D. US \$376,000

Answer (B) is correct.

Purchase discounts, allowances, and returns are subtractions from purchases because they are reductions of cost. Transportation-in is an addition because it increases cost. Thus, net purchases equals US \$346,000 ($\$400,000 + \$6,000 - \$40,000 - \$15,000 - \$5,000$).

- A . Failing to include transportation-in in the calculation results in US \$340,000.

C . Improperly omitting transportation-in and adding, rather than subtracting, purchase allowances results in US \$370,000.

D . Improperly adding, rather than subtracting, purchase allowances results in US \$376,000.

Question: 48 An organization sells a product for which demand is uncertain. Management would like to ensure that there is sufficient inventory on hand during periods of high demand so that it does not lose sales (and customers). To do so, the organization should

- A. Keep a safety stock.
- B. Use a just-in-time inventory system.
- C. Employ a materials requirements planning system.
- D. Keep a master production schedule.

Answer (A) is correct.

Safety stock is inventory maintained to reduce the number of stockouts resulting from higher-than-expected demand during lead time. Maintaining a safety stock avoids the costs of stockouts, e.g., lost sales and customer dissatisfaction.

B . The goal of a just-in-time inventory system is to reduce, not increase, inventory on hand.

C . Materials requirements planning is a system for scheduling production and controlling the level of inventory for components with dependent demand.

D . A master production schedule is a statement of the timing and amounts of individual items to be produced.

Question: 49 Companies that adopt just-in-time purchasing systems often experience

- A. An increase in carrying costs.
- B. A reduction in the number of suppliers.
- C. A greater need for inspection of goods as the goods arrive.
- D. Less need for linkage with a vendor's computerized order entry system.

Answer (B) is correct.

The objective of JIT is to reduce carrying costs by eliminating inventories and increasing the deliveries made by suppliers. Ideally, shipments of materials are received just in time to be used in the manufacturing process. The focus of quality control under JIT is the prevention of quality problems. Quality control is shifted to the supplier. Entities that adopt JIT typically do not inspect incoming goods.

The assumption is that receipts are of perfect quality. Suppliers are limited to those who guarantee perfect quality and prompt delivery.

A . Carrying costs typically decline in JIT companies. Less inventory is on hand.

C . In a JIT system, materials are delivered directly to the production line ready for insertion in the finished product.

D . The need for communication with the vendor is greater. Orders and deliveries must be made on short notice, sometimes several times a day.

Question: 50 A major benefit of computer-integrated manufacturing (CIM) is

A. Increased amount of scrap available for resale.

B. Increased working capital.

C. Delivery of customized products with long lead times.

D. Increased flexibility.

Answer (D) is correct.

CIM is a comprehensive approach to manufacturing in which design is translated into product by centralized processing and robotics. CIM can help an organization reduce costs of spoilage, increase flexibility, and increase productivity. Flexibility is the key benefit. A traditional manufacturing system might become disrupted from an emergency change. But CIM reschedules everything in the plant when a priority requirement is inserted into the system.

A . CIM decreases the amount of scrap available for resale.

B . CIM does not change working capital.

C . CIM allows production of customized high quality products with short lead times.

Question: 51 A major justification for investments in computer-integrated manufacturing (CIM) projects is

A. Reduction in the costs of spoilage, reworked units, and scrap.

B. Lower carrying amount and depreciation expense for factory equipment.

C. Increased working capital.

D. Stabilization of market share.

Answer (A) is correct.

Automating and computerizing production processes requires a substantial investment in fixed assets and an increase in risk because of greater fixed costs. CIM also necessitates an increase in software costs and extensive worker retraining. However, the costs of spoilage, rework, and scrap are reduced along with labor costs. The qualitative advantages of CIM are increased flexibility, shorter manufacturing lead time, quicker development of new products, better product delivery and service, faster response to market changes, and improved competitiveness.

B . An increase in fixed assets results in a higher carrying amount and depreciation expense.

C . Working capital normally is reduced as investments shift from current to fixed assets.

D . CIM is not directly related to market share.

Question: 52 If a just-in-time purchasing policy is successful in reducing the total inventory costs of a manufacturing company, which of the following combinations of cost changes would be most likely to occur?

A. An increase in purchasing costs and a decrease in stockout costs.

B. An increase in purchasing costs and a decrease in quality costs.

C. An increase in quality costs and a decrease in ordering costs.

D. An increase in stockout costs and a decrease in carrying costs.

Answer (D) is correct.

Just-in-time inventory attempts to eliminate the storing of materials and the associated costs. This practice increases the risk of stockouts.

A . While the effect on purchasing costs cannot be determined from the information given, the deployment of a just-in-time inventory system increases the risk of stockouts.

B . The effect on purchasing costs and quality costs cannot be determined from the information given.

C . Ordering costs should decrease under a just-in-time system, but the effect on quality costs cannot be determined from the information given.

Question: 53 When a right of return exists, an entity may recognize revenue from a sale of goods at the time of sale only if

A. The amount of future returns can be reliably estimated.

B. The seller retains the risks and rewards of ownership.

C. The buyer resells the goods.

D. The seller believes returns will not be material.

Answer (A) is correct.

One condition for recognition of revenue from the sale of goods is the transfer of the significant risks and rewards of ownership. Retention of significant risk may occur when, for example, the buyer may rescind the purchase for a reason stipulated in the contract, and the entity is uncertain about the probability of return. However, if the entity can reliably estimate future returns and recognizes a liability for returns based on experience and other pertinent information, revenue may be recognized at the time of sale if the other conditions for revenue recognition also are met.

- B . The risks and rewards of ownership must be transferred.
- C . This contingency is an example of retention of significant risk.
- D . Returns may be material if they can be reliably estimated.

Question: 54 A company uses a planning system that focuses first on the amount and timing of finished goods demanded and then determines the derived demand for raw materials, components, and subassemblies at each of the prior stages of production. This system is referred to as

- A. Economic order quantity.
- B. Materials requirements planning.
- C. Linear programming.
- D. Just-in-time purchasing.

Answer (B) is correct.

Materials requirements planning (MRP) is a system that translates a production schedule into requirements for each component needed to meet the schedule. It is usually implemented in the form of a computer-based information system designed to plan and control raw materials used in production. It assumes that forecasted demand is reasonably accurate and that suppliers can deliver based upon this accurate schedule. MRP is a centralized push-through system; output based on forecasted demand is pushed through to the next department or to inventory.

- A . The EOQ model focuses on the trade-off between carrying and ordering costs.
- C . Linear programming is a decision model concerned with allocating scarce resources to maximize profit or minimize costs.
- D . JIT is a decentralized demand-pull system. It is driven by actual demand.

Question: 55 Which of the following inventory items would be the most frequently reviewed in an ABC inventory control system?

- A. Expensive, frequently used, high stockout cost items with short lead times.

- B. Expensive, frequently used, low stockout cost items with long lead times.
- C. Inexpensive, frequently used, high stockout cost items with long lead times.
- D. Expensive, frequently used, high stockout cost items with long lead times.

Answer (D) is correct.

The ABC system is a method for controlling inventories that divides inventory items into three groups:

Group A --high-monetary-value items, a small portion (perhaps 10%) of the total inventory usage

Group B --medium-monetary-value items, about 20% of the total inventory items

Group C --low-monetary-value items, the remaining 70% of sales or usage

The ABC system permits the proper degree of managerial control to be identified and exercised over each group. Group A items are reviewed on a regular basis. Group B items may not have to be reviewed as often as group A items, but more often than group C items. For group C, extensive use of models and records is not cost effective. It is cheaper to order large quantities infrequently. The ABC method therefore reduces the safety-stock investment because high-value items are frequently monitored and medium-value items are monitored more often than inexpensive items. Frequent review can prevent stockouts and decrease inventory levels, and the cost of such review is minimized if it is limited to high- or medium-value items.

- A . Long, not short, lead times prompt a more frequent review.
- B . High, not low, stockout costs prompt a more frequent review.
- C . Expensive, not inexpensive, items prompt a more frequent review.

Question: 56 The inventory model that follows the concept that 80% of the value of an inventory is in 20% of the inventory items is the

- A. ABC system.
- B. Economic order quantity (EOQ) model.
- C. Just-in-time inventory system.
- D. Materials requirements planning (MRP) system.

Answer (A) is correct.

The ABC method of inventory control requires management to exert greatest control over the A classification items, which usually include a relatively small percentage of total items but a high percentage of the dollar volume. This method is analogous to Pareto analysis. Pareto observed that in

many actual situations, about 80% of results are caused by about 20% of people or events. For example, 20% of the customers generally account for 80% of the profit.

B . The EOQ model is intended to minimize the sum of holding and ordering costs.

C . A just-in-time system attempts to reduce holding costs by scheduling deliveries of materials as closely as possible to when they are needed in production.

D . An MRP system recognizes that the demand for one inventory item creates a dependent demand for the components of that item.

Question: 57 An advantage of using bar codes rather than other means of identification of parts used by a manufacturer is that

A. The movement of all parts is controlled.

B. The movement of parts is easily and quickly recorded.

C. Vendors can use the same part numbers.

D. Vendors use the same identification methods.

Answer (B) is correct.

A reason to use bar codes rather than other means of identification is to record the movement of parts with minimal labor costs.

A . The movement of parts can escape being recorded with any identification method.

C . Each vendor has its own part-numbering scheme, which is unlikely to correspond to the buyer's scheme.

D . Each vendor has its own identification method, although vendors in the same industry often cooperate to minimize the number of bar-code systems that they use.

Question: 58 An appropriate method for planning and controlling manufacturing inventories, such as raw materials, components, and subassemblies if demand depends on the level of production is

A. Materials requirements planning.

B. Regression analysis.

C. Capital budgeting.

D. Linear programming.

Answer (A) is correct.

Materials requirements planning (MRP) is a system that translates a production schedule into requirements for each component needed to meet the schedule. It is usually implemented in the form of a computer-based information system designed to plan and control materials used in production. It assumes that forecasted demand is reasonably accurate and that suppliers can deliver based upon this accurate schedule. MRP is a centralized push-through system. Output based on forecasted demand is pushed through to the next department or to inventory.

B . Regression analysis is used to fit a linear trend line to a dependent variable based on one or more independent variables.

C . Capital budgeting is the process of planning expenditures for long-lived assets. It involves choosing among investment proposals using a ranking procedure.

D . Linear programming is a decision model concerned with allocating scarce resources to maximize profit or minimize costs.

Question: 59 A company manufactures banana hooks for retail sale. The bill of materials for this item and the parts inventory for each material required are as follows:

Bill of Materials		
<u>Raw Material</u>	<u>Quantity Required</u>	<u>On Hand</u>
Wooden neck	1	0
Wooden base	1	0
Swag hook	1	300
Wood screws	2	400
Foot pads	4	1,000

An incoming order calls for delivery of 2,000 banana hooks in 2 weeks. The company has no finished banana hooks in current inventory. If no safety stocks are required for inventory, what are the company's net requirements for swag hooks and screws needed to fill this order?

	<u>Swag Hooks</u>	<u>Wood Screws</u>
A.	1,700	1,600
B.	1,500	3,200
C.	1,700	3,600
D.	2,000	3,600

Answer (C) is correct.

The company needs 2,000 banana hooks and therefore 2,000 swag hooks ($1 \times 2,000$) and 4,000 wood screws ($2 \times 2,000$). Given that 300 swag hooks and 400 wood screws are on hand, the company must obtain 1,700 swag hooks ($2,000 - 300$) and 3,600 wood screws ($4,000 - 400$).

- A . A total of 1,600 wood screws assumes that one wood screw is used per banana hook.
- B . A total of 1,500 swag hooks and 3,200 wood screws would be needed if 200 banana hooks were in current inventory.
- D . A total of 2,000 swag hooks would be needed if no swag hooks were in current inventory.

Question: 60 The effect of just-in-time production approaches

- A. Reduces the dependency on suppliers.
- B. Reduces the cost of implementing strategies.
- C. Decreases production facility flexibility.
- D. Decreases the need for a dependable workforce.

Answer (B) is correct.

A just-in-time (JIT) inventory system can reduce the cost of production by lowering or eliminating inventory costs.

- A . JIT production increases the need for reliable suppliers. When inventories are at low or nonexistent levels, supplier performance is critical.
- C . JIT production increases flexibility. Production is pulled by demand.
- D . JIT requires workers to be multi-skilled and independent. Thus, they need to be more dependable. Such traits are needed in a pull system.

Question: 61 A manufacturing company is attempting to implement a just-in-time (JIT) purchase policy system by negotiating with its primary suppliers to accept long-term purchase orders which result in more frequent deliveries of smaller quantities of raw materials. If the JIT purchase policy is successful in reducing the total inventory costs of the manufacturing company, which of the following combinations of cost changes would be most likely to occur?

<u>Cost Category to Increase</u>	<u>Cost Category to Decrease</u>
A. Purchasing costs	Stockout costs
B. Purchasing costs	Quality costs
C. Quality costs	Ordering costs
D. Stockout costs	Carrying costs

Answer (D) is correct.

The objective of a JIT system is to reduce carrying costs by eliminating inventories and increasing the deliveries made by suppliers. Shipments should be received just in time to be incorporated into the manufacturing process. This system increases the risk of stockout costs because the inventory buffer is reduced or eliminated.

A . The supplier may seek a concession on the selling price that will raise purchasing costs, but the manufacturing company's stockout costs will increase.

B . The cost of quality is not necessarily affected by a JIT system.

C . Fewer purchase orders are processed by the manufacturer, so the ordering costs are likely to decrease. However, the cost of quality is not necessarily affected by a JIT system.

Question: 62 An inventory planning method that minimizes inventories by arranging to have raw materials and subcomponents arrive immediately preceding their use is called

- A. A safety stock planning system.
- B. An economic order quantity model.
- C. A just-in-time inventory system.
- D. A master budgeting system.

Answer (C) is correct.

JIT is a manufacturing philosophy that combines purchasing, production, and inventory control. Minimization of inventory is a goal, but JIT also changes the production process itself. An emphasis on quality and the pull of materials related to demand are key characteristics of JIT. The factory is organized so as to bring materials and tools close to the point of use rather than keeping them in storage areas. A

key element of the JIT system is reduction or elimination of waste of materials, labor, factory space, and machine usage. Minimizing inventory is the key to reducing waste. When a part is needed on the production line, it arrives just in time, not before.

- A . Safety stock is the inventory maintained in order to reduce the number of stockouts resulting from higher-than-expected demand during lead time.
- B . The economic order quantity is the order quantity that minimizes total inventory costs.
- D . The master budget is the detailed financial plan for the next period.

Question: 63 The cost of materials has risen steadily over the year. Which of the following methods of estimating the ending balance of the materials inventory account will result in the highest profit, assuming all other variables remain constant?

- A. Last-in, first-out (LIFO).
- B. First-in, first-out (FIFO).
- C. Weighted average.
- D. Specific identification.

Answer (B) is correct.

Profit is higher when cost of goods sold is lower, other factors held constant. Cost of goods sold equals beginning inventory, plus purchases, minus ending inventory. Accordingly, cost of goods sold will be lowest when the ending inventory is highest. In an inflationary environment, ending inventory is highest under FIFO. The older, less expensive items are deemed to have been sold, leaving the more expensive items in the ending inventory.

- A . LIFO yields the lowest profit.
- C . In an inflationary environment, weighted average results in a lower profit than FIFO.
- D . Under specific identification, the newest (most expensive) items are not necessarily in the ending inventory. The result is a higher cost of goods sold and lower profit than under FIFO.

Question: 64 A retail entity maintains a markup of 25% based on cost. The entity has the following information for the current year:

Purchases of merchandise	US \$690,000
Freight-in on purchases	25,000
Sales at cost	720,000
Sales at retail	900,000
Ending inventory	80,000
Beginning inventory was	

- A. US \$40,000
- B. US \$85,000
- C. US \$110,000
- D. US \$265,000

Answer (B) is correct.

Cost of goods sold for a period equals beginning inventory, plus purchases, plus freight-in, minus ending inventory. Given that sales reflect 125% of cost, cost of goods sold must equal US \$720,000 ($\$900,000 \text{ sales} \div 1.25$). Consequently, the beginning inventory must have been US \$85,000 ($\$720,000 \text{ COGS} + \$80,000 \text{ EI} - \$690,000 \text{ purchases} - \$25,000 \text{ freight-in}$).

- A . The amount of US \$40,000 is based on a 25% markup on sales.
- C . The amount of US \$110,000 results from omitting freight-in from the computation of cost of goods available for sale.
- D . The amount of US \$265,000 results from using the sales figure for cost of goods sold.

Question: 65 DEF is the consignee for 1,000 units of product X for ABC Company. ABC should recognize the revenue from these 1,000 units when

- A. The agreement between DEF and ABC is signed.
- B. ABC ships the goods to DEF.
- C. DEF receives the goods from ABC.
- D. DEF sells the goods and informs ABC of the sale.

Answer (D) is correct.

Under a consignment arrangement, the consignor ships goods to the consignee, who acts as sales agent for the consignor. The goods are in the physical possession of the consignee but remain the property of the consignor and are included in the consignor's inventory. Revenue and the related cost of goods sold from consigned goods are recognized by the consignor only when the merchandise is sold and delivered to the final customer. Accordingly, recognition occurs when notification is received that the consignee has sold the goods.

- A . The revenue recognition criteria for sales of goods are not met in a consignment until the consignee sells the goods to a third party.
- B . The revenue recognition criteria for sales of goods are not met in a consignment until the consignee sells the goods to a third party.

C . The revenue recognition criteria for sales of goods are not met in a consignment until the consignee sells the goods to a third party.

Question: 66 On January 1, a company has no opening inventory balance. The following purchases are made during the year:

	<u>Units Purchased</u>	<u>Unit Cost</u>
January 1	5,000	US \$10.00
April 1	5,000	9.00
July 1	5,000	8.00
October 1	5,000	7.50

There are 5,000 units in inventory on December 31.

If the company uses the first-in, first-out (FIFO) method of inventory valuation, the ending inventory balance will be

- A. US \$37,500
- B. US \$40,000
- C. US \$43,125
- D. US \$50,000

Answer (A) is correct.

Under the first-in, first-out (FIFO) inventory method, the 5,000 units in ending inventory are assumed to have been the most recent items purchased. The cost of the most recent 5,000 units purchased is US \$37,500 (5,000 units × \$7.50).

B . The amount of US \$40,000 (5,000 units × \$8) is the ending inventory balance under the specific identification method if the units remaining in inventory at year end were identified as having been purchased on July 1.

C . The amount of US \$43,125 $\{5,000 \times [(US \$10 + \$9 + \$8 + \$7.50) \div 4]\}$ is the ending inventory balance under the average cost method.

D . The amount of US \$50,000 (5,000 units × US \$10) is the ending inventory balance under the last-in, first-out (LIFO) method of inventory valuation. The most recent items purchased are assumed to be sold first, so the items remaining in inventory are assigned the cost of the earliest purchases.

Question: 67 Which inventory pricing method generally approximates current cost for each of the following?

	<u>Ending Inventory</u>	<u>Cost of Goods Sold</u>
A.	FIFO	FIFO
B.	LIFO	FIFO
C.	FIFO	LIFO
D.	LIFO	LIFO

Answer (C) is correct.

FIFO assigns the most recent acquisition costs to ending inventory and the earliest acquisition costs to cost of goods sold. LIFO assigns the earliest acquisition costs to ending inventory (it is permitted by U.S. GAAP but not by IFRS). Thus, FIFO approximates current cost for ending inventory, and LIFO approximates current cost of goods sold.

A . LIFO approximates current cost of goods sold.

B . FIFO approximates current cost for ending inventory, and LIFO approximates current cost of goods sold.

D . FIFO approximates current cost for ending inventory.

Question: 68 Which of the following changes in accounting policies resulting from a significant change in the expected pattern of economic benefit will increase profit?

A. A change from FIFO to LIFO inventory valuation when costs are rising.

B. A change from FIFO to weighted-average inventory valuation when costs are falling.

C. A change from accelerated to straight-line depreciation in the later years of the depreciable lives of the assets.

D. A change from straight-line to accelerated depreciation in the early years of the depreciable lives of the assets.

Answer (B) is correct.

In a period of falling costs, FIFO results in higher cost of goods sold than the weighted-average method. FIFO includes the higher, earlier costs in cost of goods sold, and the weighted-average method averages

the later, lower costs with the higher, earlier costs. Thus, a change from FIFO to weighted-average costing reduces cost of goods sold and increases reported profit.

A . If costs are rising, applying LIFO (last in, first out) expenses the more recently acquired and more costly inventory items. Its effect is to reduce profit compared with FIFO, which expenses the earlier acquired and less costly items (a change to LIFO is allowed under U.S. GAAP but not IFRS).

C . In the later years of the depreciable life of an asset, accelerated depreciation results in lower depreciation expense than does the straight-line method. A change to straight line increases depreciation expense and reduces reported profit.

D . In the early years of the depreciable life of an asset, straight-line depreciation results in lower depreciation expense than accelerated depreciation. A change to accelerated depreciation increases depreciation expense and reduces reported profit.

Question: 69 The following information is available for an entity for the quarter ended March 31 of the current year:

Merchandise inventory, as of	
January 1 of the current year	US \$ 30,000
Sales	200,000
Purchases	190,000

The gross profit margin is normally 20% of sales. What is the estimated cost of the merchandise inventory at March 31 of the current year?

- A. US \$20,000
- B. US \$40,000
- C. US \$60,000
- D. US \$180,000

Answer (C) is correct.

Using the gross profit method, cost of goods sold for the quarter is estimated to be US \$160,000 [$\$200,000 \text{ sales} \times (1.0 - 0.2)$]. Goods available for sale was US \$220,000 ($\$30,000$ beginning inventory + $\$190,000$ purchases). Estimated ending inventory is therefore US \$60,000 ($\$220,000$ goods available for sale – $\$160,000$ estimated cost of goods sold).

- A . The difference between sales for the period and cost of goods available for sale is US \$20,000.
- B . The amount of gross profit is US \$40,000.
- D . Improperly subtracting the gross profit from cost of goods available for sale results in US \$180,000.

Question: 70 An internal auditor performs an analytical review by comparing the gross margins of various divisional operations with those of other divisions and with the individual division's performance in previous years. The internal auditor notes a significant increase in the gross margin at one division. The internal auditor does some preliminary investigation and also notes that no changes occurred in products, production methods, or divisional management during the year. The most likely cause of the increase in gross margin is a(n)

- A. Increase in the number of competitors selling similar products.
- B. Decrease in the number of suppliers of the material used in manufacturing the product.
- C. Overstatement of year-end inventory.
- D. Understatement of year-end accounts receivable.

Answer (C) is correct.

An overstatement of year-end inventory results in an increase in the gross margin (sales – cost of sales). Overstating ending inventory understates cost of sales.

A . An increase in the number of competitors most likely results in price competition and a decrease in sales revenue and gross margin.

B . A decrease in the number of suppliers most likely results in less price competition on the supply side, with a consequent increase in costs and decrease in gross margin.

D . An understatement of accounts receivable understates sales and the gross margin.

Question: 71 If ending inventory is underestimated due to an error in the physical count of items on hand, the cost of goods sold for the period will be <List A> and net earnings will be <List B>.

	<u>List A</u>	<u>List B</u>
A.	Underestimated	Underestimated
B.	Underestimated	Overestimated
C.	Overestimated	Underestimated
D.	Overestimated	Overestimated

Answer (C) is correct.

Cost of goods sold equals beginning inventory, plus purchases, minus ending inventory. If ending inventory is underestimated, cost of goods sold will be overestimated for the period. If cost of goods sold is overestimated, net earnings for the period will be underestimated.

- A . Cost of goods sold will be overestimated.
- B . Cost of goods sold will be overestimated and profit will be underestimated.
- D . Net earnings will be underestimated.

Question: 72 If certain goods owned by an entity were not recorded as a purchase and were not counted in ending inventory, in error, then

- A. Cost of goods sold for the period will be understated.
- B. Cost of goods sold for the period will be overstated.
- C. Net income for the period will be understated.
- D. There will be no effect on cost of goods sold or profit for the period.

Answer (D) is correct.

The effects of the errors on cost of goods sold are offsetting. Purchases, which increase cost of goods sold, and ending inventory, which decreases cost of goods sold, are understated by the same amount. Neither cost of goods sold nor net income is affected.

- A . Cost of goods is not understated because the errors offset each other.
- B . Cost of goods is not overstated because the errors offset each other.
- C . Cost of goods sold is unaffected by the error, so net income is also unaffected.

Question: 73 An entity started in Year 1 with 200 scented candles on hand at a cost of US \$3.50 each. These candles sell for US \$7.00 each. The following schedule represents the purchases and sales of candles during Year 1:

Transaction Number	Quantity Purchased	Unit Cost
(Goods on-hand)	200	US \$3.50
1	250	3.30
2	200	3.10
3	350	3.00

If the entity uses periodic FIFO inventory pricing and 750 units were sold, the gross profit for Year 1 is

- A. US \$2,755
- B. US \$2,805

- C. US \$2,854
- D. US \$2,920

Answer (B) is correct.

The FIFO method assumes that the first goods purchased are the first goods sold and that ending inventory consists of the latest purchases. Moreover, whether the inventory system is periodic or perpetual does not affect FIFO measurement. The cost of goods sold is US \$2,445 {beginning inventory (200 units × \$3.50) + purchases [(250 units × \$3.30) + (200 units × \$3.10) + (350 units × \$3.00)] – ending inventory (250 units × \$3.00)}. Thus, the gross profit for Year 1 using FIFO is US \$2,805 [sales (750 units × \$7.00) – cost of goods sold of \$2,445].

- A . The amount of US \$2,755 equals sales minus purchases.
- C . The amount of US \$2,854 results from using a weighted-average ending inventory and part of the cost of goods sold calculation.
- D . The amount of US \$2,920 results from using periodic LIFO inventory pricing.

Question: 74 The following selected data from statements of financial position on December 31, Year 1, and December 31, Year 2, are presented below:

	<u>12/31/Year 1</u>	<u>12/31/Year 2</u>
Trade accounts payable	US \$62,000	US \$49,000

Additional information for Year 2:

1. Cash payments to suppliers of merchandise were US \$180,000.
2. Beginning and ending inventory are equal.

Purchases in Year 2 were

- A. US \$13,000
- B. US \$193,000
- C. US \$167,000
- D. US \$180,000

Answer (C) is correct.

Purchases equal ending accounts payable, plus payments to suppliers, minus beginning accounts payable. Purchases equal US \$167,000 (\$49,000 ending accounts payable + \$180,000 payments to suppliers – \$62,000 beginning accounts payable).

- A . The amount of US \$13,000 is the change in accounts payable.

B . The amount of US \$193,000 is the amount of cash payments to suppliers plus the change in accounts payable.

D The amount of US \$180,000 is the amount of cash payments to suppliers.

Question: 75 Copper Co. had the following balances at December 31:

Inventory	US \$230,000
Purchases	530,000

Additional information:

- The balance of opening inventory was US \$140,000.

On the year-end financial statements, Copper will report cost of goods sold of

- A. US \$440,000
- B. US \$620,000
- C. US \$670,000
- D. US \$900,000

Answer (A) is correct.

Cost of goods sold equals beginning inventory, plus purchases, minus ending inventory. Accordingly, cost of goods sold is US \$440,000 ($\$140,000 + \$530,000 - \$230,000$).

- B . Reversing the opening and closing inventory figures results in US \$620,000.
- C . Improperly omitting closing inventory from the calculation results in US \$670,000.
- D . Improperly adding, rather than subtracting, closing inventory results in US \$900,000.

Question: 76 An entity had the following opening and closing inventory balances during the current year:

	1/1	12/31
Finished goods	US \$ 90,000	US \$260,000
Direct materials	105,000	130,000
Work-in-progress	220,000	175,000

The following transactions and events occurred during the current year:

- US \$300,000 of direct materials were purchased.
- US \$600,000 of direct labor costs were incurred.
- US \$750,000 of production overhead costs were incurred.

The cost of goods sold for the current year ended December 31 would be

- A. US \$900,000
- B. US \$1,500,000
- C. US \$1,630,000
- D. US \$1,670,000

Answer (B) is correct.

Cost of goods sold equals cost of goods manufactured (COGM) adjusted for the change in finished goods. COGM equals the sum of direct materials used, direct labor costs, and production overhead, adjusted for the change in work-in-progress. Direct materials used equals US \$275,000 (\$105,000 BI + \$300,000 purchases – \$130,000 EI). Thus, COGM equals US \$1,670,000 (\$275,000 DM + \$600,000 DL + \$750,000 OH + \$220,000 BWIP – \$175,000 EWIP). COGS equals US \$1,500,000 (\$1,670,000 COGM + \$90,000 BFG – \$260,000 EFG).

- A . Failing to add direct labor when calculating COGM results in US \$900,000.
- C . Failing to subtract the ending balance of materials when calculating materials used results in US \$1,630,000.
- D . The cost of goods produced is US \$1,670,000.

Fact Pattern: An entity had the following opening and closing inventory balances during the current year:

	1/1	12/31
Total inventory	US \$415,000	US \$565,000

Question: 77 If the entity's raw materials inventory as of December 31 of the current year (ending inventory) was miscounted and the true figure was higher than US \$130,000, one effect on the year-end financial statements would be that

- A. Profit is overstated.
- B. Cost of goods sold is overstated.
- C. Working capital is overstated.
- D. Cost of goods produced is understated.

Answer (B) is correct.

If the ending inventory of materials is understated, materials used is overstated, cost of goods produced is overstated, and cost of goods sold is overstated.

A . If the ending inventory of materials is understated, cost of goods sold is overstated, and net income is understated.

C . Working capital is higher when the balances of current assets are higher. If the materials inventory balance is understated, working capital will also be understated.

D . If the ending inventory of materials is understated, materials used is overstated, and cost of goods produced is overstated.

Question: 78 Which must be part of any risk model involving inventory valuation?

- A. Product warranty policies.
- B. Vendor pricing policies.
- C. Inventory shrinkage expense.
- D. Annual sales forecasts.

Answer (C) is correct.

The amount of inventory loss through shrinkage directly affects inventory valuation. Inventory shrinkage must be considered in risk models involving inventory valuation.

A . Warranties are not a part of inventory valuation.

B . Vendor pricing policies have no effect on inventory valuation until goods are purchased. The price at the time of purchase is the only price that matters in inventory valuation, and changes in vendor pricing policies would not necessarily affect valuation.

D . Sales forecasts do not affect inventory valuation.

Fact Pattern: Illustrated below is a perpetual inventory card for the current year.

Date	Units Purchased	Units Sold	Units Balance
January 1			0
January 12	1,000 @ US \$2.00		1,000
March 15		300	700
May 5	500 @ US \$2.20		1,200
July 8		500	700
November 24	1,000 @ US \$1.65		1,700

Additional information:

- The entity had no opening inventory.
- The items sold on March 15 were purchased on January 12.

- The items sold on July 8 were purchased on May 5.

Question: 79 Under the FIFO method, the per-unit cost of each product sold on July 8 was

- A. US \$1.90
- B. US \$2.00
- C. US \$1.65
- D. US \$2.20

Answer (B) is correct.

Under the FIFO method, the 800 units sold during the year are measured as if the first items purchased (the least recent price) were sold first. The first 1,000 units were purchased on January 12. The 800 units sold therefore are considered to have been sold from this batch. The per-unit cost of these items is US \$2.00.

A . The amount of US \$1.90 per unit $\{[(1,000 \times \text{US } \$2.00) + (500 \times \text{US } \$2.20) + (1,000 \times \text{US } \$1.65)] \div (1,000 + 500 + 1,000)\}$ is the cost per unit under the periodic weighted-average method.

C . The amount of US \$1.65 per unit is the cost per unit under the LIFO periodic method. The first units sold are assumed to be the last units purchased. A total of 800 units (300 + 500) were sold during the period, and the last purchase was for 1,000 units on November 24 for US \$1.65.

D . The amount of US \$2.20 per unit is the cost per unit under the specific identification method. The 500 items sold on July 8 were purchased on May 5 at a unit cost of \$2.20.

Fact Pattern: Illustrated below is a perpetual inventory card for the current year.

Date	Units Purchased	Units Sold	Units Balance
January 1			0
January 12	1,000 @ US \$2.00		1,000
March 15		300	700
May 5	500 @ US \$2.20		1,200
July 8		500	700
November 24	1,000 @ US \$1.65		1,700

Additional information:

- The entity had no opening inventory.
- The items sold on March 15 were purchased on January 12.
- The items sold on July 8 were purchased on May 5.

Question: 80 The per-unit cost of the goods sold on July 8 under the specific identification method of inventory measurement is

- A. US \$1.90
- B. US \$2.00
- C. US \$1.65
- D. US \$2.20

Answer (D) is correct.

The 500 units sold on July 8 were purchased on March 15 at a cost of US \$2.20 per unit. The per-unit cost of these units is therefore US \$2.20. Under the specific identification method, the cost of an item reflects the actual physical flow of goods rather than the approximation provided by other inventory measurement methods.

A . The amount of US \$1.90 per unit $\{[(1,000 \times \text{US } \$2.00) + (500 \times \text{US } \$2.20) + (1,000 \times \text{US } \$1.65)] \div (1,000 + 500 + 1,000)\}$ is the cost per unit under the periodic weighted-average method.

B . The amount of US \$2.00 per unit is the cost per unit under FIFO.

C . The amount of US \$1.65 per unit is the cost per unit under the periodic LIFO method.

Question: 81 A merchandising company had the following inventory related transactions in its first year of operations:

Date	Purchases in Units	Sales in Units	Balance in Units
Jan. 1	10,000 @ US \$5		10,000
March 1	6,000 @ US \$6		16,000
May 1		3,000	13,000
July 1	8,000 @ US \$6.25		21,000
Sept. 1		12,000	9,000
Nov. 1	5,000 @ US \$7		14,000
Dec. 1		2,000	12,000

If the company uses the first-in, first-out (FIFO) method of inventory measurement, the per-unit cost of the goods sold on May 1 is

- A. US \$5.00
- B. US \$5.90
- C. US \$6.00
- D. US \$7.00

Answer (A) is correct.

Under FIFO, the first items purchased are presumed to be the first sold. Given that the first 10,000 items purchased cost US \$5.00 per unit, the FIFO cost per unit of the first 3,000 items sold also must be US \$5.00.

- B . The amount of US \$5.90 is equal to the periodic weighted-average cost of inventory.
- C . The amount of US \$6.00 is equal to the per-unit cost of the inventory under a perpetual LIFO system. (LIFO is permitted under U.S. GAAP but not IFRS.)
- D . The amount of US \$7.00 is equal to the per-unit cost of the inventory under a periodic LIFO system. (LIFO is permitted under U.S. GAAP but not IFRS.)

Question: 82 An entity had 1,000 units of opening inventory that cost US \$10 per unit. On May 1, 1,000 units were purchased at a cost of US \$11 each, and on September 1 another 1,000 units were purchased at a cost of US \$12 each. If 2,000 units were sold during the year, what is cost of goods sold if the FIFO method of inventory measurement is used?

- A. US \$22,000
- B. US \$23,000
- C. US \$21,000
- D. US \$24,000

Answer (C) is correct.

Under FIFO, the first items purchased are presumed to be the first sold. Given that 3,000 units were available and 2,000 units were sold, FIFO cost of goods sold must have been US \$21,000 [(1,000 × \$10) BI + (1,000 × \$11) May 1 purchase].

- A . Cost of goods sold is US \$22,000 under the periodic weighted-average method.
- B . Cost of goods sold is US \$23,000 under LIFO periodic.
- D . The amount of US \$24,000 does not reflect the cost of goods sold under FIFO.

Question: 83 During the year, an entity sold 10,000 units and purchased inventory as follows:

<u>Date</u>	<u>Quantity Purchased</u>	<u>Unit Price</u>
January 1	8,000 units	US \$10
April 1	15,000 units	8
July 1	10,000 units	9
October 1	12,500 units	10

If the entity uses the periodic weighted-average method of inventory valuation, the per-unit cost of goods sold for the period will be

- A. US \$9.60
- B. US \$9.25
- C. US \$9.12
- D. US \$10.00

Answer (C) is correct.

Under the periodic weighted-average method, the weighted-average cost per unit is multiplied by the number of units sold to determine the cost of goods sold for the period. The total units available for sale equaled 45,500 (8,000 + 15,000 + 10,000 + 12,500). The total cost of all units available for sale was US \$415,000 [(8,000 × \$10) + (15,000 × \$8) + (10,000 × \$9) + (12,500 × \$10)]. Thus, the weighted-average cost per unit of inventory was US \$9.1209 (\$415,000 ÷ 45,500).

- A . The per-unit cost of goods sold under FIFO is US \$9.60.
- B . The unweighted average price of each unit is US \$9.25.
- D . Cost of goods sold under the periodic LIFO method is US \$10 per unit. (LIFO is permitted under U.S. GAAP but not IFRS.)

Question: 84 What is the cost of ending inventory given the following factors?

Beginning inventory	US \$ 5,000
Total production costs	60,000
Cost of goods sold	55,000

- A. US \$5,000
- B. US \$10,000
- C. US \$0
- D. US \$60,000

Answer (B) is correct.

Beginning inventory, plus purchases (or other inventory additions), minus cost of goods sold, equals ending inventory. Thus, ending inventory equals US \$10,000 (\$5,000 + \$60,000 – \$55,000).

- A . The amount of US \$5,000 is the beginning inventory.
- C . The amount of US \$0 results from incorrectly subtracting beginning inventory.
- D . The amount of US \$60,000 equals production cost.

Question: 85 On January 1, a company has no opening inventory balance. The following purchases are made during the year:

	Units Purchased	Unit Cost
January 1	5,000	US \$10.00
April 1	5,000	9.00
July 1	5,000	8.00
October 1	5,000	7.50

There are 15,000 units in inventory on December 31.

If the company uses the last-in, first-out (LIFO) method of inventory valuation, cost of goods sold for the year will be

- A. US \$37,500
- B. US \$43,125
- C. US \$45,000
- D. US \$50,000

Answer (A) is correct.

A total of 20,000 units was available for sale (0 beginning inventory + 20,000 purchased during year). Because 15,000 remain in ending inventory, 5,000 were sold (20,000 available – 15,000 remaining). Under the LIFO method, the units sold were assumed to be purchased in October. Cost of goods sold for the year therefore equaled US \$37,500 (5,000 units × \$7.50).

- B . An amount of US \$43,125 results from using an unweighted average of unit costs for the year.
- C . An amount of US \$45,000 results from assuming that the April lot was sold rather than the October lot.
- D . An amount of US \$50,000 results from applying the first-in, first-out, rather than the last-in, first-out, method.

Question: 85 On January 1, a company has no opening inventory balance. The following purchases are made during the year:

	Units Purchased	Unit Cost
January 1	5,000	US \$10.00
April 1	5,000	9.00
July 1	5,000	8.00
October 1	5,000	7.50

There are 15,000 units in inventory on December 31.

If the company uses the last-in, first-out (LIFO) method of inventory valuation, cost of goods sold for the year will be

- A. US \$37,500
- B. US \$43,125
- C. US \$45,000
- D. US \$50,000

Answer (A) is correct.

A total of 20,000 units was available for sale (0 beginning inventory + 20,000 purchased during year). Because 15,000 remain in ending inventory, 5,000 were sold (20,000 available – 15,000 remaining). Under the LIFO method, the units sold were assumed to be purchased in October. Cost of goods sold for the year therefore equaled US \$37,500 (5,000 units × \$7.50).

B . An amount of US \$43,125 results from using an unweighted average of unit costs for the year.

C . An amount of US \$45,000 results from assuming that the April lot was sold rather than the October lot.

D . An amount of US \$50,000 results from applying the first-in, first-out, rather than the last-in, first-out, method.

PART 3 UNIT 12

Question: 1 Capital structure decisions involve determining the proportions of financing from

- A. Short-term or long-term debt.
- B. Debt or equity.
- C. Short-term or long-term assets.
- D. Retained earnings or common equity.

Answer (B) is correct.

Debt and equity are the two elements of an entity's capital structure.

- A . The capital structure also includes equity.
- C . Assets are not part of the capital structure.
- D . The capital structure also includes debt and preferred equity.

Question: 2 A curve on a graph with the rate of return on the vertical axis and time on the horizontal axis depicts

- A. The internal rate of return on an investment.
- B. A yield curve showing the term structure of interest rates.
- C. The present value of future returns, discounted at the marginal cost of capital, minus the present value of the cost.
- D. A series of payments of a fixed amount for a specified number of years.

Answer (B) is correct.

The term structure of interest rates is the relationship between long- and short-term interest rates, that is, between yield to maturity and time to maturity. It is graphically depicted by a yield curve with a rate of return on the vertical axis and time to maturity on the horizontal axis. If short-term rates are higher than long-term rates, the curve will be downward sloping. If the reverse is true, the curve will be upward sloping.

- A . The internal rate of return is the interest rate at which the present value of the expected future net cash inflows is equal to the cost of the investment.
- C . It states the definition of net present value.
- D . This series is an annuity.

Question: 3 A downward-sloping yield curve depicting the term structure of interest rates implies that

- A. Interest rates have declined over recent years.
- B. Interest rates have increased over recent years.
- C. Prevailing short-term interest rates are lower than prevailing long-term interest rates.
- D. Prevailing short-term interest rates are higher than prevailing long-term interest rates.

Answer (D) is correct.

The term structure of interest rates is the relationship between long- and short-term interest rates, that is, between yield to maturity and time to maturity. It is graphically depicted by a yield curve with a rate of return on the vertical axis and time to maturity on the horizontal axis. If short-term rates are higher than long-term rates, the curve will be downward sloping. If the reverse is true, the curve will be upward sloping.

- A . The yield curve does not reflect past interest rate trends.
- B . The yield curve does not reflect past interest rate trends.
- C . The downward-sloping yield curve implies that prevailing short-term interest rates are higher than prevailing long-term interest rates.

Question: 4 Which of the following scenarios would encourage a company to use short-term loans to retire its 10-year bonds that have 5 years until maturity?

- A. The company expects interest rates to increase over the next 5 years.
- B. Interest rates have increased over the last 5 years.
- C. Interest rates have declined over the last 5 years.
- D. The company is experiencing cash flow problems.

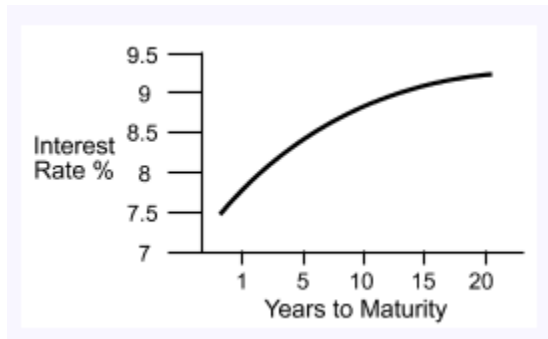
Answer (C) is correct.

If interest rates have declined, refunding with short-term debt may be appropriate. The bonds pay a higher interest rate than the new short-term debt. Assuming that rates continue to fall, the short-term debt can itself be refunded with debt having a still lower interest charge. The obvious risk is that interest rates may rise, thereby compelling the company to choose between paying off the debt or refunding it at higher rates.

- A . The company will not benefit from short-term loans if interest rates rise.
- B . The company should maintain the existing debt if prevailing interest rates are higher.

D . The company increases the cash flow problem by shifting to short-term loans.

Question: 5



The yield curve shown implies that the

- A. Credit risk premium of corporate bonds has increased.
- B. Credit risk premium of municipal bonds has increased.
- C. Long-term interest rates have a higher annualized yield than short-term rates.
- D. Short-term interest rates have a higher annualized yield than long-term rates.

Answer (C) is correct.

The term structure of interest rates is the relationship between yield to maturity and time to maturity. This relationship is depicted by a yield curve. Assuming the long-term interest rate is an average of expected future short-term rates, the curve will be upward sloping when future short-term interest rates are expected to rise. Furthermore, the normal expectation is for long-term investments to pay higher rates because of their higher risk. Thus, long-term interest rates have a higher annualized yield than short-term rates.

- A . The yield curve does not reflect the credit risk premium of bonds.
- B . The yield curve does not reflect the credit risk premium of bonds.
- D . Long-term interest rates should be higher than short-term rates.

Question: 6 An entity is arranging debt financing for the purchase of a new piece of equipment that has a 5-year expected useful life. Which of the following alternative financing arrangements has the lowest effective annual percentage rate if each has a quoted nominal rate of 9.5%?

- A. A 5-year term loan with interest compounded annually.
- B. A 10-year term loan with interest compounded semiannually.
- C. A 5-year term loan with interest compounded quarterly.

D. A 10-year term loan with interest compounded monthly.

Answer (A) is correct.

For any given quoted nominal rate, the least frequent compounding is associated with the lowest effective annual percentage cost. Annual compounding is less frequent than semiannual, quarterly, or monthly. The term of the loan is not relevant to the calculation of the effective annual percentage cost of financing.

B . The more frequent the interest compounding, the more costly the loan. Semiannual, quarterly, and monthly compounding are all more frequent than annual compounding.

C . The more frequent the interest compounding, the more costly the loan. Semiannual, quarterly, and monthly compounding are all more frequent than annual compounding.

D . The more frequent the interest compounding, the more costly the loan. Semiannual, quarterly, and monthly compounding are all more frequent than annual compounding.

Question: 7 Compared with another bond with the same risk and maturity but without a conversion feature, a convertible bond has a

A. Higher face amount.

B. Lower face amount.

C. Higher coupon rate.

D. Lower coupon rate.

Answer (D) is correct.

Convertible bonds are convertible at the holder's option into the issuer's ordinary shares at a specified price. They have a lower coupon rate than nonconvertible bonds because they offer investors a chance for capital gains.

A . The face amount is not a distinguishing feature of convertible bonds.

B . The face amount is not a distinguishing feature of convertible bonds.

C . Convertible bonds have lower, not higher, coupon rates.

Question: 8 Zero-coupon bonds

A. Sell for a small fraction of their face value because their yield is much lower than the market rate.

B. Increase in value each year as they approach maturity, providing the owner with the total payoff at maturity.

C. Are redeemable in measures of a commodity such as barrels of oil, tons of coal, or ounces of rare metal (e.g., silver).

D. Are high-interest-rate, high-risk, unsecured bonds that have been used extensively to finance leveraged buyouts.

Answer (B) is correct.

Zero-coupon bonds sell at a deep discount and increase in value each year until maturity. These bonds are not interest-bearing.

A . Deep discount bonds pay interest significantly below the market rate, and zero-coupon bonds are not interest-bearing.

C . Commodity-backed bonds are redeemable in measures of a commodity.

D . Junk bonds are high-interest-rate, high-risk, unsecured bonds.

Question: 9 Bondholders are assured of protection against inflation if they hold

A. Income bonds.

B. Convertible bonds.

C. Mortgage bonds.

D. Indexed bonds.

Answer (D) is correct.

The interest payments on indexed or purchasing power bonds are based on an inflation index, such as the consumer price index. Thus, interest paid to bondholders rises automatically when the inflation rate rises.

A . Income bonds pay interest to the holder only if the interest is earned. The interest paid is not inflation adjusted.

B . Convertible bonds can be redeemed for the common shares of the issuer at the option of the holder. Interest payments are not inflation adjusted.

C . Mortgage bonds are secured by fixed assets of the issuer. Thus, they provide greater security to bondholders, but the interest payments are not inflation adjusted.

Question: 10 From the viewpoint of the investor, which of the following securities provides the least risk?

A. Mortgage bond.

- B. Subordinated debenture.
- C. Income bond.
- D. Debentures.

Answer (A) is correct.

A mortgage bond is secured with specific fixed assets, usually real property. Thus, under the rights enumerated in the bond indenture, creditors will be able to receive payments from liquidation of the property in case of default. In a bankruptcy proceeding, these amounts are paid before any transfers are made to other creditors, including those preferences. Hence, mortgage bonds are less risky than the others listed.

B . A debenture is long-term debt that is not secured (collateralized) by specific property. Subordinated debentures have a claim on the debtor's assets that may be satisfied only after senior debt has been paid in full. Debentures of either kind are therefore more risky than mortgage bonds.

C . An income bond pays interest only if the debtor earns it. Such bonds are also more risky than secured debt.

D . Unsecured debt is riskier than a mortgage bond.

Question: 11 Which of the following classes of securities are listed in order from lowest risk or opportunity for return to highest risk/opportunity for return?

- A. Corporate first mortgage bonds; corporate income bonds; preferred shares.
- B. Corporate income bonds; corporate mortgage bonds; subordinated debentures.
- C. Common shares; corporate first mortgage bonds; corporate second mortgage bonds.
- D. Preferred shares; ordinary shares; corporate debentures.

Answer (A) is correct.

The general principle is that risk and return are directly correlated. Corporate first mortgage bonds are less risky than income bonds or shares because they are secured by specific property. In the event of default, the bondholders can have the property sold to satisfy their claims. Holders of first mortgages have rights paramount to those of any other parties, such as holders of second mortgages. Income bonds pay interest only in the event the corporation earns income. Thus, holders of income bonds have less risk than shareholders because meeting the condition makes payment of interest mandatory. Preferred shareholders receive dividends only if they are declared, and the directors usually have complete discretion in this matter. Also, shareholders have claims junior to those of debtholders if the entity is liquidated.

B . The proper listing is mortgage bonds, subordinated debentures, and income bonds. Debentures are unsecured debt instruments. Their holders have enforceable claims against the issuer even if no income is earned or dividends declared.

C . The proper listing is first mortgage bonds, second mortgage bonds, and ordinary shares. The second mortgage bonds are secured, albeit junior, claims.

D . The proper listing is debentures, preferred shares, and ordinary shares. Holders of ordinary shares cannot receive dividends unless the holders of preferred shares receive the stipulated periodic percentage return, in addition to any arrearages if the preferred shares are cumulative.

Question: 12 Which of the following securities is likely to have the least risk?

- A. Income bonds.
- B. Debentures.
- C. Subordinated debentures.
- D. First-mortgage bonds.

Answer (D) is correct.

First-mortgage bonds are backed by fixed assets.

A . Income bonds only pay interest if interest is earned.

B . Debentures are unsecured bonds.

C . Subordinated debentures are subordinated to other debt.

Question: 13 An entity must select from among several methods of financing arrangements when meeting its capital requirements. To acquire additional growth capital while attempting to maximize earnings per share, an entity should normally

- A. Attempt to increase both debt and equity in equal proportions, which preserves a stable capital structure and maintains investor confidence.
- B. Select debt over equity initially, even though increased debt is accompanied by interest costs and a degree of risk.
- C. Select equity over debt initially, which minimizes risk and avoids interest costs.
- D. Discontinue dividends and use current cash flow, which avoids the cost and risk of increased debt and the dilution of EPS through increased equity.

Answer (B) is correct.

Earnings per share ordinarily are higher if debt is used to raise capital instead of equity, provided that the entity is not over-leveraged. The reason is that the cost of debt is lower than the cost of equity because interest is tax deductible. However, the prospect of higher EPS is accompanied by greater risk to the entity resulting from required interest costs, creditors' liens on the entity's assets, and the possibility of a proportionately lower EPS if sales volume fails to meet projections.

A . EPS is not a function of investor confidence and is not maximized by concurrent proportional increases in both debt and equity. EPS are usually higher if debt is used instead of equity to raise capital, at least initially.

C . Equity capital is initially more costly than debt.

D . Using only current cash flow to raise capital is usually too conservative an approach for a growth-oriented entity. Management is expected to be willing to take acceptable risks to be competitive and attain an acceptable rate of growth.

Question: 14 Common shareholders with preemptive rights are entitled to

- A. Vote first at annual meetings.
- B. Purchase any additional bonds sold by the entity.
- C. Purchase any additional shares sold by the entity.
- D. Gain control of the entity in a proxy fight.

Answer (C) is correct.

Preemptive rights protect common shareholders' proportional ownership interests from dilution in value. A secondary purpose is to maintain the shareholders' control of the entity. Accordingly, the preemptive right, whether granted by statute or by the corporate charter, grants common shareholders the power to acquire on a pro rata basis any additional common shares sold by the entity. Preemptive rights also apply to debt convertible into common shares.

A . There is no prescribed order of shareholder voting.

B . Preemptive rights concern only equity ownership. Thus, they do not apply to nonconvertible debt.

D . A proxy fight is an attempt to gain control of an entity by persuading shareholders to grant their voting rights to others.

Question: 15 Participating preferred shareholders are entitled to

- A. Monitor any sinking funds for the purchase and retirement of debt.
- B. Vote at all annual meetings.
- C. Convert their shares into common shares.

D. Share in the entity's earnings beyond the stated dividend level.

Answer (D) is correct.

Participating preferred shareholders are entitled to share in the earnings of the entity. They participate in earnings distributions under set terms and conditions. Thus, after the stated preferred dividend is paid, and common shareholders receive an equal dividend, any remaining dividends are allocated to all shareholders in proportion to the par values of their shares.

A . The participation privilege is unrelated to monitoring privileges.

B . Preferred shareholders do not have voting rights except in circumstances in which the entity has not paid the preferred share dividends for a specified period.

C . A conversion feature, not a participation feature, allows conversion to common shares.

Question: 16 Preferred shares are securities with characteristics of both common shares and bonds. Preferred shares have <List A> like common shares and <List B> like bonds.

	<u>List A</u>	<u>List B</u>
A.	A maturity date	A fixed periodic payment
B.	No maturity date	No fixed periodic payment
C.	A maturity date	No fixed periodic payment
D.	No maturity date	A fixed periodic payment

Answer (D) is correct.

Like common shares (but unlike bonds), preferred shares have no maturity date, although certain preferred shares (transient preferred shares) must be redeemed within a short time (e.g., 5 to 10 years). Like bonds (but unlike common shares), preferred shares have a fixed periodic payment. The fixed payment is in the form of a stated dividend in the case of the preferred shares and interest payments in the case of bonds. However, preferred dividends, unlike interest, do not become an obligation unless declared.

A . Preferred shares do not have a maturity date.

B . Preferred shares have fixed periodic dividend payments.

C . Preferred shares do not have a maturity date but do have fixed periodic dividend payments.

Question: 17 Which of the following is usually not a feature of cumulative preferred shares?

A. Has priority over common shares with regard to earnings.

B. Has priority over common shares with regard to assets.

C. Has voting rights.

D. Has the right to receive dividends in arrears before common share dividends can be paid.

Answer (C) is correct.

Preferred shares do not usually have voting rights. Preferred shareholders are usually given the right to vote for directors only if the entity has not paid the preferred dividend for a specified period of time, such as 10 quarters. Such a provision is an incentive for management to pay preferred dividends.

A . Preferred shares have priority over common shares with regard to earnings, so dividends must be paid on preferred shares before they can be paid on common shares.

B . Preferred shares have priority over common shares with regard to assets. In the event of liquidation, for example, because of bankruptcy, the claims of preferred shareholders must be satisfied in full before the common shareholders receive anything.

D . Cumulative preferred shares have the right to receive any dividends not paid in prior periods before common share dividends are paid.

Question: 18 Preferred and common shares differ in that

A. Failure to pay dividends on common shares will not force the firm into bankruptcy, while failure to pay dividends on preferred shares will force the firm into bankruptcy.

B. Common share dividends are a fixed amount, while preferred share dividends are not.

C. Preferred shares have a higher priority than common shares with regard to earnings and assets in the event of bankruptcy.

D. Preferred share dividends are deductible as an expense for tax purposes, while common share dividends are not.

Answer (C) is correct.

In the event of bankruptcy, the claims of preferred shareholders must be satisfied before common shareholders receive anything. The interests of common shareholders are secondary to those of all other claimants.

A . Failure to pay dividends will not force the firm into bankruptcy, whether the dividends are for common or preferred shares. Only failure to pay interest will force the firm into bankruptcy.

B . Preferred dividends are fixed.

D . Neither common nor preferred dividends are tax deductible.

Question: 19 The following excerpt was taken from a company's financial statements: “. . . 10% convertible participating . . . US \$10,000,000.” What is most likely being referred to?

A. Bonds.

B. Common shares.

C. Share options.

D. Preferred shares.

Answer (D) is correct.

Preferred shareholders have priority over common shareholders in the assets and earnings of the entity. If preferred dividends are cumulative, any past preferred dividends must be paid before any common dividends. Preferred shares may also be convertible into common shares, and it may be participating. For example, 10% fully participating preferred shares will receive additional distributions at the same rates as other shareholders if dividends paid to all shareholders exceed 10%.

A . Bonds normally have a coupon yield stated in percentage and may be convertible but are not participating.

B . Common shares are not described as convertible or participating on the financial statements.

C . Common share options are not participating and do not have a stated yield rate.

Question: 20 If two entities, entity X and entity Y, are alike in all respects except that entity X employs more debt financing and less equity financing than entity Y does, which of the following statements is true?

A. Entity X has more net earnings variability than entity Y.

B. Entity X has more operating earnings variability than entity Y.

C. Entity X has less operating earnings variability than entity Y.

D. Entity X has less financial leverage than entity Y.

Answer (A) is correct.

Given that entity X is more highly leveraged, it has greater fixed financing charges than entity Y. Interest payments are fixed financing charges, but common share dividends are not. As a result, entity X will be more risky and therefore will have a more volatile net income stream than entity Y, if other factors are constant.

- B . The level of fixed financing charges does not affect operating income variability.
- C . The level of fixed financing charges does not affect operating income variability.
- D . Entity X has greater, not less, financial leverage than entity Y. Greater use of debt financing means that an entity has greater financial leverage.

Question: 21 The market value of an entity's outstanding common shares will be higher, everything else equal, if investors

- A. Have a lower required return on equity.
- B. Expect lower dividend growth.
- C. Have longer expected holding periods.
- D. Have shorter expected holding periods.

Answer (A) is correct.

The price an investor expects to pay for shares can be calculated using the dividend growth model.

$$\text{Price per share} = \frac{\text{Next dividend}^*}{\text{Req. rate of return} - \text{Div. growth rate}}$$

* Next dividend = Current dividend × (1 + Div. growth rate)

- B . If investors expect lower dividend growth, the market value of common shares will decrease.
- C . The expected holding periods of investors are not related to the market value of the common shares.
- D . The expected holding periods of investors are not related to the market value of the common shares.

Question: 22 Assume that nominal interest rates just increased substantially but that the expected future dividends for an entity over the long run were not affected. As a result of the increase in nominal interest rates, the entity's share price should

- A. Increase.
- B. Decrease.
- C. Stay constant.
- D. Change, but in no obvious direction.

Answer (B) is correct.

The price an investor expects to pay for shares can be calculated using the dividend growth model.

$$\text{Price per share} = \frac{\text{Next dividend}^*}{\text{Req. rate of return} - \text{Div. growth rate}}$$

* $\text{Next dividend} = \text{Current dividend} \times (1 + \text{Div. growth rate})$

As nominal interest rates increase, investors' required rates of return increase. This increases the denominator of the dividend growth model. Because dividends are not expected to change, the numerator is unaffected. Thus, the expected share price will decrease.

- A . A higher interest rate raises the required return of investors, which results in a lower share price.
- C . A higher interest rate raises the required return of investors, which results in a lower share price.
- D . A higher interest rate raises the required return of investors, which results in a lower share price.

Question: 23 An entity has 10,000 outstanding shares with a market value of US \$25 each. It just paid a US \$1 per share dividend. Dividends are expected to grow at a constant rate of 10%. If the net proceeds of issuing one share are US \$23.75, the cost of new equity financing is calculated by the following formula:

A.
$$\frac{\text{Dividend at time zero}}{\text{Market price}} + \text{Dividend growth rate}$$
$$= (\text{US } \$1 \div \$25) + .10$$
$$= .04 + .10 = 14.00\%$$

B.
$$\frac{\text{Dividend at time zero}}{\text{Net proceeds}} + \text{Dividend growth rate}$$
$$= (\text{US } \$1 \div \$23.75) + .10$$
$$= .0421 + .10 = 14.21\%$$

C.
$$\frac{\text{Expected dividend at end of period}}{\text{Market price}} + \text{Dividend growth rate}$$
$$= (\text{US } \$1.10 \div \$25) + .10$$
$$= .044 + .10 = 14.40\%$$

D.

$$\begin{aligned} & \frac{\text{Expected dividend at end of period}}{\text{Net proceeds of issuing one share}} + \text{Dividend growth rate} \\ & = \left[\frac{\text{US } \$1(1.1)}{\$23.75} \right] + .10 \\ & = .0463 + .10 = 14.63\% \end{aligned}$$

Answer (D) is correct.

The cost of new equity is calculated by adding the expected dividend yield, based on the net proceeds of the new issue, to the expected dividend growth rate. The expected dividend at the end of the period equals the dividend at time zero times one plus the expected dividend growth rate. Net proceeds received by the entity when issuing one common share equals the market price minus any flotation costs, such as underwriting fees, printing, and advertising. The calculation of the cost of new equity is as follows:

$$\begin{aligned} & \frac{\text{Expected dividend at end of period}}{\text{Net proceeds of issuing one share}} + \text{Div. growth rate} \\ & = \frac{\text{US } \$1(1 + .10)}{\$23.75} + 10\% \\ & = 14.63\% \end{aligned}$$

- A . The end-of-period expected dividend and the net proceeds of the issue should be included in calculating the dividend yield.
- B . The end-of-period expected dividend should be included in calculating the dividend yield.
- C . The net proceeds, not market price, should be included in calculating the dividend yield.

Question: 24 An entity has made the decision to finance next year's capital projects through debt rather than additional equity. The benchmark cost of capital for these projects should be the

- A. Before-tax cost of new-debt financing.
- B. After-tax cost of new-debt financing.
- C. Cost of equity financing.
- D. Weighted-average cost of capital.

Answer (D) is correct.

A weighted average of the costs of all financing sources should be used, with the weights determined by the usual financing proportions. The terms of any financing raised at the time of initiating a particular project do not represent the cost of capital for the entity. When an entity achieves its optimal capital

structure, the weighted-average cost of capital is minimized. The cost of capital is a composite, or weighted average, of all financing sources in their usual proportions. The cost of capital should also be calculated on an after-tax basis.

- A . The weighted-average cost of capital is calculated on an after-tax basis.
- B . The weighted-average cost of capital consists of both debt and equity components calculated on an after-tax basis.
- C . The cost of capital is an after-tax composite, or weighted average, of all financing sources in their usual proportions.

Question: 25 The marginal cost of capital (MCC) curve for an entity rises twice, first when the entity has raised US \$75 million and again when US \$175 million of new funds has been raised. These increases in the MCC are caused by

- A. Increases in the returns on the additional investments undertaken.
- B. Decreases in the returns on the additional investments undertaken.
- C. Decreases in the cost of at least one of the financing sources.
- D. Increases in the cost of at least one of the financing sources.

Answer (D) is correct.

The MCC is a weighted average of the costs of various new financing sources. If the cost of any source of new financing increases, the MCC curve will rise. The curve shifts upward with each incremental increase in financing cost because the lowest-cost sources are assumed to be used first.

- A . Financing costs do not directly depend on rates of return on investment.
- B . Financing costs do not directly depend on rates of return on investment.
- C . As additional funds are raised, an increase in the cost of a source of financing, not a decrease, will result in an increase in the MCC.

Question: 26 A firm seeking to optimize its capital budget has calculated its marginal cost of capital and projected rates of return on several potential projects. The optimal capital budget is determined by

- A. Calculating the point at which marginal cost of capital meets the projected rate of return, assuming that the most profitable projects are accepted first.
- B. Calculating the point at which average marginal cost meets average projected rate of return, assuming the largest projects are accepted first.
- C. Accepting all potential projects with projected rates of return exceeding the lowest marginal cost of capital.

D. Accepting all potential projects with projected rates of return lower than the highest marginal cost of capital.

Answer (A) is correct.

In economics, a basic principle is that a firm should increase output until marginal cost equals marginal revenue. Similarly, the optimal capital budget is determined by calculating the point at which marginal cost of capital (which increases as capital requirements increase) and marginal efficiency of investment (which decreases if the most profitable projects are accepted first) intersect.

B . The intersection of average marginal cost with average projected rates of return when the largest (not most profitable) projects are accepted first offers no meaningful capital budgeting conclusion.

C . The optimal capital budget may exclude profitable projects as lower-cost capital goes first to projects with higher rates of return.

D . Accepting projects with rates of return lower than the cost of capital is not rational.

Question: 27 When calculating the cost of capital, the cost assigned to retained earnings should be

A. Zero.

B. Lower than the cost of external common equity.

C. Equal to the cost of external common equity.

D. Higher than the cost of external common equity.

Answer (B) is correct.

Newly issued (i.e., external) common equity is more costly than retained earnings. The company incurs issuance costs when raising new, outside funds.

A . The cost of retained earnings is the rate of return shareholders require on equity capital the firm obtains by retaining earnings. The opportunity cost of retained funds will be positive.

C . Retained earnings will always be less costly than external equity financing. Earnings retention does not require the payment of issuance costs.

D . Retained earnings will always be less costly than external equity financing. Earnings retention does not require the payment of issuance costs.

Question: 28 If an entity has a higher dividend-payout ratio, then, if all else is equal, it will have a

A. Higher marginal cost of capital.

B. Lower marginal cost of capital.

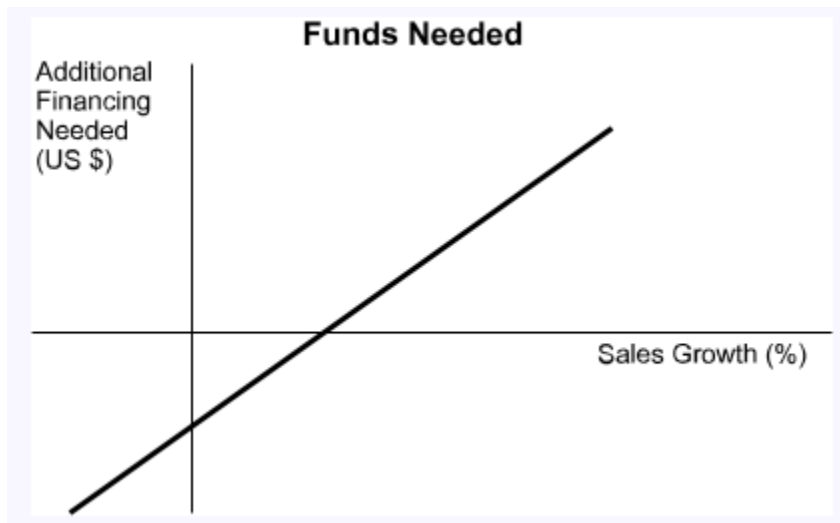
- C. Higher investment opportunity schedule.
- D. Lower investment opportunity schedule.

Answer (A) is correct.

The higher the dividend-payout ratio, the sooner retained earnings are exhausted and the entity must seek external financing. Assuming the same investments are undertaken, the result is a higher marginal cost of capital because lower-cost capital sources will be used up earlier.

- B . The marginal cost of capital is higher.
- C . The existence of investment opportunities is unrelated to the dividend payout.
- D . The existence of investment opportunities is unrelated to the dividend payout.

Fact Pattern:



Question: 29 The funds-needed line does not pass through the origin unless the entity has a

- A. 100% dividend payout policy.
- B. 0% percent dividend payout policy.
- C. 100% sales growth rate.
- D. 0% sales growth rate.

Answer (A) is correct.

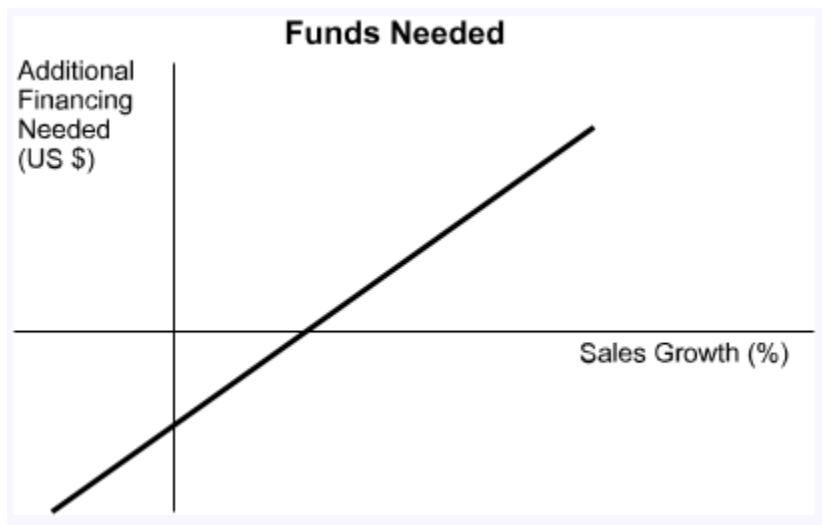
If all earnings are paid as dividends, no earnings are retained. All sales growth must be financed from spontaneous or external sources.

B . The funds-needed line passes through the origin only in the special case in which all earnings are paid as dividends.

C . The funds-needed line is a graph of the relationship between sales growth rates and additional financing needs. It is not drawn for just one point or one level of sales growth.

D . While the sales growth rate would be zero at the point where the funds-needed line passed through the origin, funds needed may be nonzero when sales growth is zero.

Fact Pattern:



Question: 30 If all else is equal, entities with higher profit margins require less additional financing for any sales growth rate. If the profit margin of an entity increased, the funds-needed line would shift

- A. Up and become less steep.
- B. Up and become more steep.
- C. Down and become less steep.
- D. Down and become more steep.

Answer (C) is correct.

A higher profit margin would reduce the additional financing needed, shifting the funds needed line down.

A . A higher profit margin would reduce the additional financing needed, as stated in the question. The result would be a downward, not an upward, shift in the funds-needed line.

B . A higher profit margin would cause a downward shift with a lower slope.

D . The line would become less, not more, steep if the entity had a higher profit margin.

Question: 31 If k is the cost of debt and t is the marginal tax rate, the after-tax cost of debt, k_i , is best represented by the formula

- A. $k_i = k \div t$
- B. $k_i = k \div (1 - t)$
- C. $k_i = k(t)$
- D. $k_i = k(1 - t)$

Answer (D) is correct.

The after-tax cost of debt is the cost of debt times the quantity one minus the tax rate. For example, the after-tax cost of a 10% bond is 7% [$10\% \times (1 - 30\%)$] if the tax rate is 30%.

- A . The after-tax cost of debt is the cost of debt times the quantity one minus the tax rate.
- B . The after-tax cost of debt is the cost of debt times the quantity one minus the tax rate.
- C . The cost of debt times the marginal tax rate equals the tax savings from issuing debt.

Question: 32 The cost of debt most frequently is measured as

- A. Actual interest rate.
- B. Actual interest rate adjusted for inflation.
- C. Actual interest rate plus a risk premium.
- D. Actual interest rate minus tax savings.

Answer (D) is correct.

The cost of debt most frequently is measured as the after-tax interest rate on the debt. Therefore, the component cost is equal to the effective rate multiplied by 1 minus the marginal tax rate.

- A . The cost of debt takes into account the deductibility of interest by subtracting the tax savings from the actual interest rate.
- B . The effective rate already takes inflation into consideration. The actual interest rate does not have to be adjusted periodically for inflation. In addition, the tax savings are ignored in this option.
- C . The risk premium is applicable when calculating the cost of retained earnings, not the cost of debt.

Question: 33 The optimal capitalization for an organization usually can be determined by the

- A. Maximum degree of financial leverage (DFL).

- B. Maximum degree of total leverage (DTL).
- C. Lowest total weighted-average cost of capital (WACC).
- D. Intersection of the marginal cost of capital and the marginal efficiency of investment.

Answer (C) is correct.

The cost of capital is a weighted average of the various debt and equity components of an organization's cost structure. The weighted-average cost of capital weights the percentage cost of each component by the percentage of that component in the financial structure. The optimal capital structure minimizes the weighted-average cost of capital and thereby maximizes the value of the firm's stock.

A . Since the degree of financial leverage is characterized by a percentage change in earnings available to common stockholders associated with a given percentage change in net operating income, DFL does not pertain to capital structure.

B . The degree of total leverage is the product of the degree of financial leverage and the degree of operating leverage. As such, it does not pertain to capital structure.

D . The intersection of the marginal cost of capital and the marginal efficiency of investment produces the equilibrium investment level for the firm at a particular interest rate, but it does not optimize the capital structure of a firm.

Question: 34 Which of the following capital budgeting techniques implicitly assumes that the cash flows are reinvested at the company's minimum required rate of return?

	<u>Net Present Value</u>	<u>Internal Rate of Return</u>
A.	Yes	Yes
B.	Yes	No
C.	No	Yes
D.	No	No

Answer (B) is correct.

The net present value method consists of discounting the after-tax cash flows over a project's life using the company's minimum required rate of return, so reinvestment is also assumed to be at this rate. The internal rate of return method assumes use of the internal rate of return.

- A . By definition, the internal rate of return method assumes reinvestment at the internal rate of return.
- C . The net present value method does use the company's minimum required rate of return, and the internal rate of return method does not.
- D . The net present value method assumes reinvestment using the company's minimum required rate of return.

Question: 35 Neu Co. is considering the purchase of an investment that has a positive net present value based on Neu's 12% hurdle rate. The internal rate of return would be

- A. 0
- B. 12%
- C. > 12%
- D. < 12%

Answer (C) is correct.

As the hurdle rate of an investment increases, the net present value decreases. At a hurdle rate of 12%, this investment is generating a return greater than US \$0. Thus, to reduce the project's return to exactly US \$0 (i.e., to find the internal rate of return), the discount rate must be increased. This investment therefore must have an internal rate of return greater than 12%.

- A . If an investment has a positive net present value, the internal rate of return is greater than zero.
- B . Since the project has a nonzero net present value at 12%, the internal rate of return cannot be exactly 12%.
- D . A positive net present value indicates an internal rate of return greater than the hurdle rate.

Question: 36 The capital budgeting technique known as the accounting rate of return uses

	<u>Revenue over Life of Project</u>	<u>Depreciation Expense</u>
A.	No	Yes
B.	No	No
C.	Yes	No
D.	Yes	Yes

Answer (D) is correct.

The accounting rate of return is a capital budgeting technique that ignores the time value of money. It is calculated by dividing the increase in average annual accounting net income by the required investment. Thus, both an average of annual revenues over the life of the project and annual expenses are relevant.

- A . An average of the annual revenues over the life of a project also affects the rate of return.
- B . A project's revenue and depreciation expense both affect the accounting rate of return.
- C . A project's depreciation expense also affects the accounting rate of return.

Question: 37 What is an internal rate of return?

- A. A net present value.
- B. An accounting rate of return.
- C. A payback period expected from an investment.
- D. A time-adjusted rate of return from an investment.

Answer (D) is correct.

The internal rate of return is a convenient tool for assessing capital budgeting projects. It is the discount rate at which the present value of all the net cash flows equals US \$0.

- A . The net present value of a project is a dollar amount; the internal rate of return is a percentage.
- B . An accounting rate of return is a primitive tool for assessing capital projects that uses accrual-basis numbers and ignores the time value of money.
- C . A payback period is a time period; the internal rate of return is a percentage.

Question: 38 A project has an initial outlay of US \$1,000. The projected cash inflows are

Year 1	US \$200
Year 2	200
Year 3	400
Year 4	400

What is the investment's payback period?

- A. 4.0 years.
- B. 3.5 years.
- C. 3.4 years.
- D. 3.0 years.

Answer (B) is correct.

Cash inflows are assumed to occur equally throughout the Years 1 through 4. At the end of Year 3, US \$800 ($\$200 + \$200 + \400) will have been received. The remaining US \$200 will be received in one half of Year 4 ($\text{US } \$200 \div \400).

- A . The total cash inflow over 4.0 years is US \$1,200 ($\$200 + \$200 + \$400 + \400).
- C . Cash inflows over 3.4 years will total US \$960 [$(\$200 + \$200 + \$400) + (\$400 \times 0.4)$].
- D . The 3-year total is US \$800 ($\$200 + \$200 + \400).

Question: 39 Which of the following phrases defines the internal rate of return on a project?

- A. The number of years it takes to recover the investment.
- B. The discount rate at which the net present value of the project equals zero.
- C. The discount rate at which the net present value of the project equals one.
- D. The weighted-average cost of capital used to finance the project.

Answer (B) is correct.

The IRR is the discount rate at which the investment's NPV equals zero. Accordingly, it is the rate that equates the present value of the expected cash inflows with the present value of the expected cash outflows.

- A . The payback period is the number of years it takes to recover the investment.
- C . The IRR is the discount rate at which the NPV is zero.

D . The weighted-average cost of capital is the single, composite rate of return on the components of capital used to finance the project.

Question: 40 Management at MDK Corp. is deciding whether to replace a delivery van. A new delivery van costing US \$40,000 can be purchased to replace the existing delivery van, which cost the company US \$30,000 and has accumulated depreciation of US \$20,000. An employee of MDK has offered US \$12,000 for the old delivery van. Ignoring income taxes, which of the following correctly states relevant costs when making the decision on whether to replace the delivery vehicle?

- A. Purchase price of new van, disposal price of old van, gain on sale of old van.
- B. Purchase price of new van, purchase price of old van, gain on sale of old van.
- C. Purchase price of new van, disposal price of old van.
- D. Purchase price of new van, purchase price of old van, accumulated depreciation of old van, gain on sale of old van, disposal price of old van.

Answer (C) is correct.

The relevant cash flows for capital budgeting are (1) the cost of new equipment, (2) the annual after-tax cash savings or inflows, (3) the depreciation tax shield, and (4) the proceeds from disposal of old equipment (residual or salvage value). Ignoring income taxes and given no information about the depreciation tax shield for the new van, the relevant cash flows are the price of the new van and the disposal price of the old van.

- A . The gain on sale of the old van [$\text{US } \$12,000 - (\$30,000 - \$20,000)$] is not a cash flow and is not relevant.
- B . The gain on sale of the old van is not a cash flow, and the price of the old van is a sunk cost.
- D . The accumulated depreciation and gain on sale of the old van are not cash flows.

Question: 41 The capital budgeting technique known as net present value uses

	<u>Cash Flow over Life of Project</u>	<u>Time Value of Money</u>
A.	No	Yes
B.	No	No
C.	Yes	No
D.	Yes	Yes

Answer (D) is correct.

NPV is a capital budgeting method that consists of discounting the net after-tax cash flows over a project's life using the appropriate discount rate.

- A . Net present value also uses cash flow over the life of the project.
- B . Net present value uses both the time value of money and the project's cash flows.
- C . Net present value also uses the time value of money.

Question: 42 Net present value as used in investment decision-making is stated in terms of which of the following options?

- A. Net income.
- B. Earnings before interest, taxes, and depreciation.
- C. Earnings before interest and taxes.
- D. Cash flow.

Answer (D) is correct.

Net present value is defined as the difference between (1) the present value of the estimated net cash inflows provided by the investment and (2) the present value of the estimated net cash outflows. If the net present value is positive, the investment should be undertaken.

- A . Net income derives from the entity's operations.
- B . Earnings before interest, taxes, and depreciation is only a practicable measure when considering the entirety of operations.

C . Like net income and earnings before interest, taxes, and depreciation, earnings before interest and taxes is only useful when considering all operations of the business.

Question: 43 Which of the following is an advantage of net present value modeling?

- A. It is measured in time, not dollars.
- B. It uses accrual basis, not cash basis accounting for a project.
- C. It uses the accounting rate of return.
- D. It accounts for compounding of returns.

Answer (D) is correct.

Net present value modeling's primary strength is its incorporation of the time value of money.

- A . Net present value modeling measures dollars, not time.
- B . Net present value modeling does not rely on accrual-basis numbers.
- C . One of net present value modeling's strengths is that it does not use the accounting rate of return.

Question: 44 The following information pertains to Krel Co.'s computation of net present value relating to a contemplated project:

Discounted expected cash inflows	US \$1,000,000
Discounted expected cash outflows	700,000
Net present value is	

- A. US \$300,000
- B. US \$700,000
- C. US \$850,000
- D. US \$1,000,000

Answer (A) is correct.

The net present value of a project is the excess of the present values of the estimated cash inflows over the cost of the investment. Thus, the net present value of a project is US \$300,000 (\$1,000,000 discounted expected cash inflows – \$700,000 discounted expected cash outflows, or cost of the investment). Because the net present value is positive, the project should be accepted.

- B . The discounted expected cash outflows is US \$700,000.
- C . The average of the discounted expected cash inflows and outflows is US \$850,000.

D . The discounted expected cash inflows is US \$1,000,000.

Question: 45 Which of the following statements is correct regarding the payback method as a capital budgeting technique?

- A. The payback method considers the time value of money.
- B. An advantage of the payback method is that it indicates if an investment will be profitable.
- C. The payback method provides the years needed to recoup the investment in a project.
- D. Payback is calculated by dividing the annual cash inflows by the net investment.

Answer (C) is correct.

The payback period is the number of years required for the net cash inflows to equal the original investment. The strength of the payback method is its simplicity. It is calculated by dividing the initial investment by the annual cash inflows.

- A . The discounted payback method, not the payback method, considers the time value of money.
- B . The payback method determines when the investment's cash outflows will be recovered, not whether it will be profitable.
- D . The payback method is not calculated by dividing the annual cash inflows by the net investment.

Question: 46 A project is expected to result in the following adjustments over the next year:

- Cash sales increase by US \$400,000.
- Cash expenses increase by US \$180,000.

Assume the corporate tax rate is 21%. The total relevant net cash flows during that year are

- A. US \$84,000
- B. US \$37,800
- C. US \$173,800
- D. US \$220,000

Answer (C) is correct.

The total relevant net cash flows for this project for the next year can be calculated as follows:

Answer (C) is correct.

The total relevant net cash flows for this project for the next year can be calculated as follows:

Additional cash sales	US \$400,000
Additional cash expenses	(180,000)
Additional cash inflow from operations	<u>US \$220,000</u>
Minus: Income tax expense (US \$220,000 × .21)	(46,200)
Total relevant net cash flows	<u><u>US \$173,800</u></u>

- A . The amount of US \$84,000 equals 21% of additional cash sales.
- B . The amount of US \$37,800 equals 21% of additional cash expenses.
- D . Cash sales minus cash expenses equals US \$220,000.

Fact Pattern: A firm with an 18% desired rate of return is considering the following projects (on January 1, Year 1):

	January 1, Year 1 Cash Outflow (000's Omitted)	December 31, Year 5 Cash Inflow (000's Omitted)	Project Internal Rate of Return
Project A	US \$3,500	US \$7,400	16%
Project B	4,000	9,950	?

Present Value of \$1 Due at the End of N Periods							
N	12%	14%	15%	16%	18%	20%	22%
4	.6355	.5921	.5718	.5523	.5158	.4823	.4230
5	.5674	.5194	.4972	.4761	.4371	.4019	.3411
6	.5066	.4556	.4323	.4104	.3704	.3349	.2751

Question: 47 Using the net present value method for a 5-year project, Project A's net present value is

- A. US \$(316,920)
- B. US \$(265,460)
- C. US \$0
- D. US \$316,920

Answer (B) is correct.

The cash flow at December 31 of Year 5 is at the end of a 5-year period, and the net present value method uses the firm's cost of capital of 18%. The present value factor for 18% for 5 years is .4371, and US \$7,400,000 multiplied by .4371 equals US \$3,234,540, which is US \$265,460 less than the present cash outflow of US \$3,500,000.

- A . The amount of US \$(316,920) discounts the cash inflow at the correct discount rate (18%), but for 4 years instead of 5, and also subtracts the cash inflow from the cash outflow, instead of vice versa.

- C . The amount of US \$0 cannot be computed using the table values and monetary amounts given.
- D . The amount of US \$316,920 discounts the cash inflow at the correct discount rate (18%), but for 4 years instead of 5.

Fact Pattern: A firm with an 18% desired rate of return is considering the following projects (on January 1, Year 1):

	January 1, Year 1		December 31, Year 5		Project Internal Rate of Return		
	Cash Outflow (000's Omitted)		Cash Inflow (000's Omitted)				
Project A	US \$3,500		US \$7,400		16%		
Project B	4,000		9,950		?		
Present Value of \$1 Due at the End of N Periods							
N	12%	14%	15%	16%	18%	20%	22%
4	.6355	.5921	.5718	.5523	.5158	.4823	.4230
5	.5674	.5194	.4972	.4761	.4371	.4019	.3411
6	.5066	.4556	.4323	.4104	.3704	.3349	.2751

Question: 48 The internal rate of return (IRR) is the discount rate at which the net present value of the cash inflow equals the cash outflow. Project B's IRR is closest to

- A. 15%
- B. 18%
- C. 20%
- D. 22%

Question: 49 Everything else being equal, the internal rate of return (IRR) of an investment project will be lower if

- A. The investment cost is lower.
- B. Cash inflows are received later in the life of the project.
- C. Cash inflows are larger.
- D. The project has a shorter payback period.

Answer (B) is correct.

The IRR is the discount rate at which the net present value of a capital project is zero. Because the present value of a dollar is higher the sooner it is received, projects with later cash flows will have lower

net present values for any given discount rate than will projects with earlier cash flows, if other factors are constant. Hence, projects with later cash flows will have a lower IRR.

A . The present value of the cash inflows is inversely related to the discount rate; that is, if the discount rate is higher, the present value of the cash inflows is lower. If the investment cost is lower, a higher discount rate (the IRR) will be required to set the net present value equal to zero.

C . The larger the cash inflows, the higher the IRR will be. Higher cash inflows have a higher present value at any given discount rate. A higher discount rate will be required to set the net present value equal to zero.

D . Projects with shorter payback periods have higher cash inflows early in the life of the project. Projects with earlier cash inflows have higher IRRs.

Question: 50 If the net present value (NPV) of Project E is known to be higher than the NPV of Project F, it can be concluded that

- A. The internal rate of return (IRR) of Project E will definitely be higher than the IRR of Project F.
- B. The IRR of Project E will definitely be lower than the IRR of Project F.
- C. The ranking of IRRs is indeterminate based on the information provided.
- D. The payback period for Project E is definitely shorter than the payback period for Project F.

Answer (C) is correct.

The IRRs of two projects can be calculated and ranked only after information about cash flows and time periods has been gathered. The relative ranking of NPVs permits no conclusion to be drawn about the ranking of IRRs.

A . Without monetary amounts and time periods, no conclusion can be drawn about IRRs.

B . Without monetary amounts and time periods, no conclusion can be drawn about IRRs.

D . Without monetary amounts and time periods, no conclusion can be drawn about payback periods.

Fact Pattern: A company that annually reviews its investment opportunities and selects appropriate capital expenditures for the coming year is presented with two projects, called Project A and Project B. Best estimates indicate that the investment outlay for Project A is US \$30,000 and for Project B is US \$1 million. The projects are considered to be equally risky. Project A is expected to generate cash inflows of US \$40,000 at the end of each year for 2 years. Project B is expected to generate cash inflows of US \$700,000 at the end of the first year and US \$500,000 at the end of the second year. The company has a cost of capital of 8%.

Present Value of US \$1 Due at the End of N Periods

N	8%
0	1
1	0.9259
2	0.8575
3	0.7938

Question: 51 If Projects A and B are mutually exclusive, which of the following statements is true?

- A. The company should undertake Project A only.
- B. The company should undertake Project B only.
- C. The company should undertake both projects.
- D. The company should not undertake either project.

Answer (B) is correct.

For two mutually exclusive projects, the company should undertake the project with the higher positive net present value. Project B has a higher NPV than Project A. The NPVs of the two projects can be calculated as follows:

$$\begin{aligned} \text{NPV of Project A} &= [\text{US } \$ (30,000) \times 1] + (\$40,000 \times 0.9259) + (\$40,000 \times 0.8573) \\ &= \text{US } \$ (30,000) + \$37,036 + \$34,292 \\ &= \text{US } \$41,328 \\ \text{NPV of Project B} &= [\text{US } \$ (1,000,000) \times 1] + (\$700,000 \times 0.9259) + (\$500,000 \times 0.8573) \\ &= \text{US } \$ (1,000,000) + \$648,130 + \$428,650 \\ &= \text{US } \$76,780 \end{aligned}$$

Project B's positive NPV is higher.

- A . The NPV method ranks B over A.
- C . The projects are mutually exclusive.
- D . Both projects have positive NPVs and one should be selected.

Fact Pattern: A company that annually reviews its investment opportunities and selects appropriate capital expenditures for the coming year is presented with two projects, called Project A and Project B. Best estimates indicate that the investment outlay for Project A is US \$30,000 and for Project B is US \$1 million. The projects are considered to be equally risky. Project A is expected to generate cash inflows of US \$40,000 at the end of each year for 2 years. Project B is expected to generate cash inflows of US \$700,000 at the end of the first year and US \$500,000 at the end of the second year. The company has a cost of capital of 8%.

Present Value of US \$1 Due at the End of N Periods

<u>N</u>	<u>8%</u>
0	1
1	0.9259
2	0.8575
3	0.7938

Question: 52 If Projects A and B are independent, which of the following statements is true?

- A. The company should undertake Project A only.
- B. The company should undertake Project B only.
- C. The company should undertake both projects.
- D. The company should not undertake either project.

Answer (C) is correct.

Independent projects are those whose cash flows are not affected by the acceptance or nonacceptance of other projects. The company must decide whether to accept or to reject each of the projects. Because both projects have a positive NPV calculated using the firm's 8% cost of capital, both should be accepted.

- A . Project B should also be undertaken.
- B . Project A should also be undertaken.
- D . Each project has a positive NPV, so both should be undertaken.

Question: 53 A characteristic of the payback method (before taxes) is that it

- A. Incorporates the time value of money.
- B. Neglects total project profitability.
- C. Uses accrual accounting inflows in the numerator of the calculation.
- D. Uses the estimated expected life of the asset in the denominator of the calculation.

Answer (B) is correct.

The payback method calculates the number of years required to complete the return of the original investment. This measure is computed by dividing the net investment required by the average expected cash flow to be generated, resulting in the number of years required to recover the original investment. Payback is easy to calculate but has two principal problems: it ignores the time value of money, and it gives no consideration to returns after the payback period. Thus, it ignores total project profitability.

- A . The payback method does not incorporate the time value of money.
- C . The payback method uses the net investment in the numerator of the calculation.
- D . Payback uses the net annual cash inflows in the denominator of the calculation.

Question: 54 The economic value of a firm will rise following an increase in

- A. Net cash flow.
- B. Systematic risk.
- C. Unsystematic risk.
- D. The discount rate.

Answer (A) is correct.

In economic theory, the value of a firm is the present value of its expected future cash flows. The

following is the formula:

$$\sum_{t=1}^N \frac{CF_t}{(1 + i)^t}$$

If CF = expected cash flow in Year t, i = interest rate, t = year, and N = last year in the planning horizon.

- B . Systematic (market) risk is the risk faced by all firms. If it increases, cost of capital (an interest rate) increases, the denominator of the economic value formula increases, and the economic value falls.
- C . Unsystematic risk (the risk unique to the firm) can be mitigated by diversification. Thus, it does not necessarily affect the economic value calculation.
- D . The discount rate is a component of the denominator of the economic value calculation. Thus, if the discount rate increases, the denominator increases and the economic value falls.

Question: 55 Actual and projected sales of an entity for September and October are as follows:

	Cash Sales	Credit Sales
September (actual)	US \$20,000	US \$50,000
October (projected)	30,000	55,000

All credit sales are collected in the month following the month in which the sale is made. The September 30 cash balance is US \$23,000. Cash disbursements in October are projected to be US \$94,000. To maintain a minimum cash balance of US \$15,000 on October 31, the entity will need to borrow

- A. US \$0
- B. US \$6,000

C. US \$11,000

D. US \$16,000

Answer (B) is correct.

This entity's October 31 cash balance can be calculated as follows:

September 30 cash balance	US \$23,000
Collections from September credit sales	50,000
Collections from October cash sales	30,000
Disbursements	(94,000)
Ending balance	<u>US \$ 9,000</u>

To reach its targeted cash balance on October 31, the entity will have to borrow US \$6,000 (\$15,000 target balance – \$9,000 ending balance).

A . The entity will need to borrow US \$6,000.

C . The entity will need to borrow US \$6,000.

D . The entity will need to borrow US \$6,000.

Question: 56 The correct equation for calculating the approximate percentage cost, on an annual basis, of not taking trade discounts is

A.
$$\frac{\text{Discount \%}}{100 - \text{Discount \%}} \times \frac{360}{[\text{Days credit is outstanding} - \text{Discount period}]}$$

B.
$$\frac{\text{Discount \%}}{100} \times \frac{360}{[\text{Days credit is outstanding} - \text{Discount period}]}$$

C.
$$\frac{100 - \text{Discount \%}}{\text{Discount \%}} \times \frac{360}{[\text{Days credit is outstanding} - \text{Discount period}]}$$

D.
$$\frac{\text{Discount } \%}{100 - \text{Discount } \%} \times \frac{[\text{Days credit is outstanding} - \text{Discount period}]}{360}$$

Question: 57 An entity obtaining short-term financing with trade credit will pay a higher percentage financing cost, everything else being equal, when the

- A. Discount percentage is lower.
- B. Items purchased have a higher price.
- C. Items purchased have a lower price.
- D. Supplier offers a longer discount period.

Answer (D) is correct.

If the discount period is longer, the days of extra credit obtained by forgoing the discount are fewer. Assuming other factors are constant, the result is that the cost of trade credit, that is, the cost of not taking the discount, is greater.

- A . The lower the discount percentage, the lower the opportunity cost of forgoing the discount and using the trade credit financing.
- B . Percentage financing cost is unaffected by the purchase price of the items.
- C . Percentage financing cost is unaffected by the purchase price of the items.

Question: 58 Factoring is the

- A. Selling of accounts receivable by one entity to another.
- B. Selling of inventory by one entity to another.
- C. Conversion of accounts receivable to bad debt on financial statements for accounts that are long overdue.
- D. Adjustment of inventories on financial statements for supplies that have become obsolete.

Answer (A) is correct.

A factor purchases an entity's accounts receivable and assumes the risk of collection. The seller receives money immediately to reinvest in new inventories. The financing cost is usually high: about 2 points or more above prime, plus a fee for collection. Factoring has been traditional in the textile industry for years, and companies in many industries have recently found it an efficient means of operation. An entity that uses a factor can eliminate its credit department, accounts receivable staff, and bad debts.

These reductions in costs can more than offset the fee charged by the factor, which can often operate more efficiently than its clients because of the specialized nature of its service.

B . Factoring is a source of short-term funds through sale of receivables.

C . Factoring is a source of short-term funds through sale of receivables.

D . Factoring is a source of short-term funds through sale of receivables.

Question: 59 An entity has accounts payable of US \$5 million with terms of 2% discount within 15 days, net 30 days (2/15, net 30). It can borrow funds from a bank at an annual rate of 12%, or it can wait until the 30th day when it will receive revenues to cover the payment. If it borrows funds on the last day of the discount period in order to obtain the discount, its total cost will be

A. US \$51,000 less.

B. US \$75,500 less.

C. US \$100,000 less.

D. US \$24,500 more.

Answer (B) is correct.

To take advantage of the 2% discount, the entity will need to borrow US \$4,900,000 ($\$5,000,000 \times 98\%$). The interest on this amount for the 15 days until revenues are received to repay it amounts to US \$24,500 [$\$4,900,000$ principal \times 12% annual interest rate \times (15 \div 360) duration of loan], and the total cost will be US \$4,924,500. The total cost if the discount is not taken will be US \$5,000,000, resulting in a savings of US \$75,500 by taking out the loan.

A . The amount of US \$51,000 less is based on a 30-day borrowing period.

C . The amount of US \$100,000 less does not consider the interest paid.

D . The amount of US \$24,500 more reflects interest paid but ignores the discounted price.

Question: 60 A short-term bank loan will have a higher effective financing cost if it has which combination of characteristics?

A. A 10% compensating balance and regular interest.

B. A 10% compensating balance and discount interest.

C. A 20% compensating balance and regular interest.

D. A 20% compensating balance and discount interest.

Answer (D) is correct.

The most costly combination of characteristics is a higher compensating balance and discount interest. The higher the compensating balance, the higher the portion of the loan funds that must be left on deposit with the lender. Hence, the interest paid is charged on a smaller amount of funds available to be used by the borrower, and the effective cost is higher. Also, discount interest is deducted from the loan funds in advance, resulting in a further increase in the effective financing cost.

A . Lower compensating balances and regular interest are less costly.

B . A lower compensating balance is less costly.

C . Regular interest is less costly.

Question: 61 An entity borrows US \$100,000 from its bank for a 1-year period. The bank charges interest at a nominal rate of 15% per annum and requires a US \$10,000 compensating balance. The effective annual interest rate on the loan is

A. 16.67%

B. 15.00%

C. 12.50%

D. 25.00%

Answer (A) is correct.

A compensating balance is an amount that the borrower must keep on deposit with the lender. The effective annual interest rate is increased by the compensating balance requirement. The effective rate equals the interest expense divided by the total amount of borrowed funds minus the compensating balance, or 16.67% $[(US \$100,000 \times 0.15) \div (\$100,000 - \$10,000)]$.

B . This percentage does not adjust for the compensating balance requirement.

C . This percentage is merely the average of the nominal rate and the compensating balance percentage.

D . The sum of the nominal rate and the compensating balance percentage is 25.00%.

Question: 62 The credit instrument known as a banker's acceptance

A. Calls for immediate payment upon delivery of the shipping documents to the bank's customer and acceptance of goods by the bank.

B. Involves an invoice being signed by the banker upon receipt of goods, after which both the banker and the seller record the transaction on their respective books.

C. Is a time draft payable on a specified date and guaranteed by the bank.

D. Is a method of sales financing in which the bank retains title to the goods until the buyer has completed payment.

Answer (C) is correct.

A time draft (trade acceptance) is a form of commercial draft because it is drawn by a seller on the buyer; that is, it calls for the buyer to pay a specified amount. The draft and the shipping documents related to the goods are then sent to the buyer's bank, which transmits the draft to the buyer. The buyer accepts the draft by signing it. A time draft, however, is similar to a promissory note because it is payable at a specific time in the future rather than upon acceptance by the buyer, which is characteristic of a sight draft. If a seller is reluctant to ship goods because of concern about the buyer's ability to pay a time draft, the seller's bank may, for a fee, guarantee payment. This banker's acceptance is an assumption of the obligation to pay at the due date.

A . A sight draft calls for immediate payment upon delivery of the shipping documents to, and the acceptance of the draft by, the buyer.

B . An open account is a credit arrangement involving only the signing of an invoice by the buyer.

D . The description is of a conditional sales contract except that the seller, not the bank, retains title to the goods until the buyer has completed payment.

Question: 63 An example of secured short-term financing is

A. Commercial paper.

B. A warehouse receipt.

C. A revolving credit agreement.

D. Trade credit.

Answer (B) is correct.

A warehouse receipt is one of the two major types of documents of title; the other is the bills of lading. A warehouse receipt is issued by a person engaged in the business of storing goods for hire. Security for short-term inventory financing can be arranged if the debtor places its inventory under the control of the lender or its agent (e.g., a public warehouse), and the lender holds the warehouse receipts.

A . Commercial paper is a type of unsecured, short-term promissory note issued by large entities to other entities, insurance companies, mutual funds, etc.

C . A revolving credit agreement is a formal line of credit, usually with a bank, that large entities often use.

D . Accounts payable, or trade credit, is the most common source of unsecured short-term financing.

Question: 64 Which of the following financial instruments can be traded in international money markets?

- A. Mortgages.
- B. Preferred shares.
- C. U.S. Treasury bills.
- D. U.S. Treasury bonds.

Answer (C) is correct.

Funds are borrowed or lent for short periods (less than 1 year) in money markets. Examples of instruments traded in money markets are U.S. Treasury bills, bankers' acceptances, commercial paper, negotiable certificates of deposit, money market mutual funds, Eurodollar market time deposits, and consumer credit loans. Capital markets trade shares and long-term debt.

- A . Mortgages are long-term, capital market securities.
- B . Preferred shares are long-term, capital market securities.
- D . U.S. Treasury bonds are long-term, capital market securities.

Question: 65 The following forms of short-term borrowing are available to an entity:

- Floating lien
- Factoring
- Revolving credit
- Chattel mortgages
- Bankers' acceptances
- Lines of credit
- Commercial paper

The forms of short-term borrowing that are unsecured credit are

- A. Floating lien, revolving credit, chattel mortgage, and commercial paper.
- B. Factoring, chattel mortgage, bankers' acceptances, and line of credit.
- C. Floating lien, chattel mortgage, bankers' acceptances, and line of credit.
- D. Revolving credit, bankers' acceptances, line of credit, and commercial paper.

Answer (D) is correct.

An unsecured loan is a loan made by a bank based on credit information about the borrower and the ability of the borrower to repay the obligation. The loan is not secured by collateral, but is made on the signature of the borrower. Unsecured credit is not backed by collateral. Revolving credit, bankers'

acceptances, lines of credit, and commercial paper are all unsecured means of borrowing. A chattel mortgage is a loan secured by personal property (movable property such as equipment or livestock). A floating lien is also secured by property, such as inventory, the composition of which may be constantly changing. Factoring is a form of financing in which receivables serve as security.

A . A chattel mortgage is a loan secured by personal property (movable property such as equipment or livestock). Also, a floating lien is secured by property, such as inventory, the composition of which may be constantly changing.

B . A chattel mortgage is a loan secured by personal property (movable property such as equipment or livestock). Also, factoring is a form of financing in which receivables serve as security.

C . A chattel mortgage is a loan secured by personal property (movable property such as equipment or livestock). Also, a floating lien is secured by property, such as inventory, the composition of which may be constantly changing.

Question: 66 Short-term, unsecured promissory notes issued by large entities are known as

- A. Agency securities.
- B. Bankers acceptances.
- C. Commercial paper.
- D. Repurchase agreements.

Answer (C) is correct.

Commercial paper is the term for the short-term (typically less than 9 months), unsecured, large denomination (often over US \$100,000) promissory notes issued by large, creditworthy companies to other companies and institutional investors. In many instances, the maturity date is only a few days after issuance.

A . An agency security is issued by a corporation or agency created by a government. Examples are government securities issued by the bodies that finance mortgages, such as the Federal National Mortgage Association (Fannie Mae) in the U.S.

B . Bankers' acceptances are drafts drawn on deposits at a bank. The acceptance by the bank guarantees payment at maturity. They are normally used to finance a specific transaction.

D . A repurchase agreement involves a secured loan to a government securities dealer. It allows the buyer to retain interest income although the seller-dealer can repurchase after a specified time.

Question: 67 An individual had taxable income of US \$23,000 per year and paid US \$8,000 in income tax. The individual's taxable income then increased to US \$30,000 per year resulting in a US \$10,000 income tax liability. The personal tax system being applied to this individual is

- A. Progressive.
- B. Regressive.
- C. Marginal.
- D. Proportional.

Answer (B) is correct.

The average tax rate of the individual has decreased from 34.8% (US \$8,000 ÷ \$23,000) to 33.3% (US \$10,000 ÷ \$30,000). Under a regressive tax system, the average tax rate falls as income rises, although the amount of tax paid may rise.

A . Under a progressive tax system, both the amount of tax and the percentage of income paid in tax (the average tax rate) rise as income increases. In the case described, the individual pays a higher amount of tax but a lower percentage of income in tax.

C . Marginal is not a type of tax system but a type of tax rate. The marginal tax rate is the tax rate paid on incremental income.

D . Under a proportional income tax system, the average tax rate is the same for all levels of income. The average tax rate of this individual falls as income rises.

Question: 68 In a <List A> personal tax system, an individual’s marginal tax rate is normally <List B> the average tax rate.

	<u>List A</u>	<u>List B</u>
A.	Progressive	Greater than
B.	Progressive	Equal to
C.	Regressive	Equal to
D.	Regressive	Greater than

Answer (A) is correct.

The marginal tax rate is the tax applicable to the last unit of income, whereas the average tax rate is the total tax paid divided by taxable income. In a progressive tax system, higher incomes attract higher tax rates, so the marginal tax rate paid on the last unit of income exceeds the average tax rate.

B . In a progressive tax system, the tax rate varies with the level of income, so the marginal and average tax rates differ.

C . In a regressive tax system, the tax rate varies with the level of income, so the marginal and average tax rates differ.

D . In a regressive tax system, the marginal tax rate is less than, not greater than, the average tax rate.

Question: 69 To index a progressive tax system to inflation, the government must

- A. Adjust only tax deductions and exemptions.
- B. Adjust only tax brackets.
- C. Adjust deductions, exemptions, and tax brackets.
- D. Ensure that nominal tax receipts grow more slowly than inflation.

Answer (C) is correct.

If tax brackets are not adjusted for inflation, increases in nominal but not real income may push taxpayers into tax brackets with higher (progressive) rates. Additionally, deductions and exemptions must be indexed so that the real incidence of taxation is not increased by inflation. Increases in nominal but not real income will result in higher real taxable income if deductions and exemptions have not been adjusted for inflation.

A . If only deductions and exemptions are indexed, real taxes will still increase with inflation as taxpayers experience bracket creep.

B . If only tax brackets are adjusted, deductions and exemptions will have less real value. Real taxes will rise.

D . Indexing does not result in nominal tax receipts growing more slowly than the rate of inflation. Rather, indexing maintains the same real rate of taxation by ensuring that nominal tax receipts keep pace with inflation.

Question: 70 Which of the following designations refers to taxes that will not necessarily take a larger absolute amount of income as income rises?

- A. Progressive.
- B. Proportional.
- C. Regressive.
- D. Regenerative.

Answer (C) is correct.

Regressive taxes are those for which the average tax rate falls as income rises. They take a smaller percentage of income as income rises, so they will not necessarily take a larger absolute amount of income as income rises.

A . Progressive taxes, for which the average tax rate rises as income rises, take both a larger percentage of income and a larger absolute amount of income as income rises.

B . Proportional taxes, for which the average tax rate is constant for all income levels, always take a larger absolute amount of income as income rises.

D . “Regenerative” is not a term used to designate types of taxes.

Question: 71 A tax is regressive if

- A. Individuals with higher incomes pay a higher percentage of their income in tax.
- B. The burden for payment falls disproportionately on lower-income persons.
- C. Individuals pay a constant percentage in taxes, regardless of income level.
- D. Individuals with lower incomes pay a lower percentage of their income in tax.

Answer (B) is correct.

With a regressive tax, the percentage paid in taxes decreases as income increases. For example, excise taxes and payroll taxes are both regressive taxes. An excise tax is regressive because its burden falls disproportionately on lower-income persons. As personal income increases, the percentage of income paid declines because an excise tax is a flat amount per quantity of the good or service purchased.

A . A progressive tax is a tax in which individuals with higher (lower) incomes pay a higher (lower) percentage of their income in tax. For example, income taxes are progressive.

C . A proportional tax is a tax in which the individual pays a constant percentage in taxes, regardless of income level. A sales tax is a proportional tax.

D . A progressive tax is a tax in which individuals with higher (lower) incomes pay a higher (lower) percentage of their income in tax. For example, income taxes are progressive.

Question: 72 A taxpayer who earns US \$50,000 during the year and pays a 15% tax rate on the first US \$30,000 of income and a 30% tax rate on all earnings over US \$30,000 has a(n)

- A. Marginal tax rate of 15%.
- B. Marginal tax rate of 21%.
- C. Average tax rate of 21%.
- D. Average tax rate of 22.5%.

Answer (C) is correct.

The average tax rate is calculated using the weighted-average method. The weight assigned to each rate is determined by the proportion of taxable income subject to it. The average tax rate is 21% $[(\$30,000 \div \$50,000) \times .15 + (\$20,000 \div \$50,000) \times .30]$.

- A . The marginal tax rate is 30%. The marginal tax rate equals the highest rate paid.
- B . The marginal tax rate is 30%. The marginal tax rate equals the highest rate paid.
- D . A rate of 22.5% is a simple numerical average.

Question: 73 General sales taxes tend to be regressive with respect to income because

- A. A larger portion of a lower income person's income is subject to the tax.
- B. A smaller portion of a lower income person's income is subject to the tax.
- C. The tax rate is higher for person with lower income.
- D. The tax claims an increasing amount of income as income rises.

Answer (A) is correct.

A sales tax is regressive with respect to income even though the rate is the same regardless of the buyer's income. The reason is that a greater percentage of a low-income individual's income is exposed to the tax. A higher-income individual should be able to save more and therefore shield a greater percentage of his or her income from the tax.

- B . A larger portion of a lower-income person's income is subject to the tax.
- C . The general sales tax rate is uniform for all taxpayers.
- D . If the tax claims an increasing amount of income as income rises, it is progressive, not regressive.

Question: 74 A nation has a progressive tax structure with income tax brackets that are not indexed to inflation. An individual taxpayer experiences an income increase just equal to the general inflation rate and moves into a higher tax bracket. The individual taxpayer will then experience <List A> nominal taxes payable and <List B> real taxes payable.

	<u>List A</u>	<u>List B</u>
A.	Increasing	Increasing
B.	Increasing	Decreasing
C.	Decreasing	Increasing
D.	Decreasing	Decreasing

Answer (A) is correct.

Because the taxpayer's income increase is equal to the general inflation rate, no real increase in income has occurred. However, some or all of the increase is subject to a higher tax rate. Accordingly, the taxpayer will experience an increase in both nominal taxes payable and in real taxes payable.

B . Real taxes payable and nominal taxes payable will increase.

C . Real taxes payable and nominal taxes payable will increase.

D . Real taxes payable and nominal taxes payable will increase.

Question: 75 Which of the following refers to taxes that do not necessarily take a larger absolute share of an increase in income?

A. Progressive.

B. Proportional.

C. Regressive.

D. Flat.

Answer (C) is correct.

Taxes are regressive if the average tax rate falls as income rises. A regressive tax structure therefore does not increase the absolute amount of tax due as income rises.

A . Progressive taxes, for which the average tax rate rises as income rises, take both a larger percentage of income and a larger absolute amount of income as income rises.

B . Proportional taxes, for which the average tax rate is constant for all income levels, always take a larger absolute amount of income as income rises.

D . A flat tax would have the same percentage tax rate regardless of income and would therefore take a larger absolute amount of income as income rises.

Question: 76 An increase in excise taxes will generate <List A> tax revenue if it is levied on products for which demand is <List B> elastic.

	<u>List A</u>	<u>List B</u>
A.	More	More
B.	More	Less
C.	Negative	Less
D.	Less	Less

Answer (B) is correct.

A higher excise tax increases the selling price of the product. This price increase will have a less negative effect on sales volume for products with less elastic demand. Examples of products with low elasticity of demand include gasoline, tobacco, and alcohol. The tax revenue generated by an increase in excise taxes is therefore higher if the tax is levied on products with less elastic demand.

A . Price elasticity of demand is inversely correlated with the revenue effects of an increase in excise taxes.

C . Price elasticity of demand is inversely correlated with the revenue effects of an increase in excise taxes.

D . Price elasticity of demand is inversely correlated with the revenue effects of an increase in excise taxes.

Question: 77 An entity in a 40% tax bracket needs <List A> of operating income to pay US \$100,000 of interest and <List B> of pretax income to pay US \$100,000 of dividends, rounded to the nearest US \$1,000.

	<u>List A</u>	<u>List B</u>
A.	US \$60,000	US \$60,000
B.	US \$100,000	US \$100,000
C.	US \$100,000	US \$167,000
D.	US \$167,000	US \$100,000

Answer (C) is correct.

Interest is deductible from operating income to obtain taxable income, but dividends are not. Thus, only US \$100,000 of pretax income is needed to pay \$100,000 of interest, but \$167,000 of pretax income [$\$100,000 \div (1.0 - .4)$] is needed to pay \$100,000 of dividends if the entity is in a 40% tax bracket.

A . An entity in a 40% tax bracket needs at least US \$100,000 of operating income to pay \$100,000 of either interest or dividends.

B . Pretax income of US \$167,000 is required to pay \$100,000 of dividends.

D . An entity in a 40% tax bracket needs US \$100,000 of operating income to pay \$100,000 of interest, and \$167,000 of pretax income is needed to pay \$100,000 of dividends.

Question: 78 Which of the following correctly describes the introduction of a government tax credit on investments?

A. Corporate investments will have higher net present values, all else equal, than without the tax credit.

B. Tax credits on investments are designed to restrain inflation.

C. Tax credits on investments increase investment costs, and all else equal, reduce the level of corporate investment.

D. Tax credits on investments are taxes that are typically levied on individual projects rather than on groups of projects.

Answer (A) is correct.

An investment tax credit is an incentive because it directly reduces future tax payments. Thus, corporate investments will have higher net present values, all else equal, than without tax credits.

B . Tax credits reduce the corporate tax bill. With more profits available for dividends, inflation will not be restrained.

C . If other factors are held constant, future net cash inflows from an investment are increased by tax credits. Hence, tax credits make investment more attractive.

D . Investment tax credits are not taxes levied on projects.

Question: 79 On what basis is value-added tax collected?

A. The difference between the value of an entity's sales and the value of its purchases from other domestic entities.

B. The difference between the selling price of a real estate property and the amount the entity originally paid for the property.

C. The value of an entity's sales to related companies.

D. The profit earned on an entity's sales.

Answer (A) is correct.

A value-added tax (VAT) is collected on the basis of the value created by the entity. This tax is measured by the difference between the value of the entity's sales and the value of its purchases. A VAT is, in effect, a retail sales tax. Because a consumer can avoid the tax by not purchasing, a VAT encourages saving and discourages consumption.

B . The difference between the selling price of a real estate property and the amount the entity originally paid for the property is a capital gain.

C . The value of an entity's sales to related companies is the internal transfer price.

D . The profit earned on an entity's sales is subject to the income tax.

Question: 80 In most countries, <List A> taxes tend to be <List B> with respect to income.

	<u>List A</u>	<u>List B</u>
A.	General sales	Proportional
B.	Property	Regressive
C.	Personal income	Proportional
D.	Personal income	Regressive

Answer (B) is correct.

Property taxes tend to be regressive. Taxpayers with lower incomes must pay a higher portion of their incomes for necessities, such as housing.

A . General sales taxes tend to be regressive. The lower the taxpayer's income, the higher the proportion that is usually paid in sales taxes, which are collected at a flat rate per dollar. Low-income taxpayers are unable to save as high a portion of their income as high-income taxpayers. Thus, the latter are less exposed to general sales taxes because they avoid the tax on the amount saved.

C . Personal income taxes tend to be progressive. Higher tax rates are charged on higher incomes.

D . Personal income taxes tend to be progressive. Higher tax rates are charged on higher incomes.

Question: 81 An entity purchases US \$150,000 of inputs from other entities. The entity sells all of its output for US \$2.5 million. Rather than paying income tax, the entity must pay a 25% value-added tax. How much tax will be due for this year's activities?

- A. US \$37,500
- B. US \$470,000
- C. US \$587,500
- D. US \$625,000

Answer (C) is correct.

The value added is the difference between the value of the output and the value of the purchased inputs. Value-added tax payable equals the value-added tax rate times value added, or US \$587,500 $[(\$2,500,000 - \$150,000) \times .25]$.

A . The amount of US \$37,500 is 25% of the cost of inputs.

- B . The amount of US \$470,000 is the result of a 20% value-added tax.
- D . The amount of US \$625,000 is the value-added tax rate multiplied by the output of the entity.

Question: 82 Under a value-added taxing system

- A. Businesses must pay a tax only if they make a profit.
- B. The consumer ultimately bears the incidence of the tax through higher prices.
- C. Consumer savings are discouraged.
- D. The amount of value added is the difference between an entity's sales and its cost of goods sold.

Answer (B) is correct.

A value-added tax is based on consumption. The tax is levied on the value added to goods by each business unit in the production and distribution chain. It is the consumer who ultimately bears the incidence of the tax because businesses subject to the tax will raise prices to offset the operating cost of the tax.

- A . Businesses must pay a value-added tax regardless of whether they make a profit.
- C . A value-added tax encourages savings. This tax is paid only on consumption, not savings.
- D . The amount of value added is the difference between an entity's sales and its purchases.

Question: 83 Value-added taxes are levied on

- A. Interest income received by individual owners of publicly traded bonds.
- B. Dividend income received by corporations owning shares of other corporations.
- C. The value of an entity's assets.
- D. The difference between an entity's sales and its purchases from other entities.

Answer (D) is correct.

A value-added tax is levied on the value an entity adds to a good or service. This amount is measured as the difference between the value of an entity's sales and the value of its purchases from other entities. A value-added tax is therefore similar to a retail sales tax. It is equivalent to a national sales tax on consumer goods. By penalizing consumption, it encourages saving and investment.

- A . Value-added taxes are not levied on personal interest income.
- B . Value-added taxes are not levied on corporate dividend income.
- C . Value-added taxes are not levied on the value of an entity's assets.

Question: 84 The price that one division of a company charges another division for goods or services provided is called the

- A. Market price.
- B. Transfer price.
- C. Outlay price.
- D. Distress price.

Answer (B) is correct.

A transfer price is charged by one segment of an organization for a product or service supplied to another segment of the same organization.

- A . Market price is an approach to determine a transfer price.
- C . Outlay price is an approach to determine a transfer price.
- D . Distress price is an approach to determine a transfer price.

Question: 85 A limitation of transfer prices based on actual cost is that they

- A. Charge inefficiencies to the department that is transferring the goods.
- B. Can lead to suboptimal decisions for the company as a whole.
- C. Must be adjusted by some markup.
- D. Lack clarity and administrative convenience.

Answer (B) is correct.

The optimal transfer price of a selling division should be set at a point that will have the most desirable economic effect on the firm as a whole while at the same time continuing to motivate the management of every division to perform efficiently. Setting the transfer price based on actual costs rather than standard costs would give the selling division little incentive to control costs.

- A . Inefficiencies are charged to the buying department.
- C . By definition, cost-based transfer prices are not adjusted by some markup.
- D . Cost-based transfer prices provide the advantages of clarity and administrative convenience.

Question: 86 One department of an organization, Final Assembly, is purchasing subcomponents from another department, Materials Fabrication. The price that will be charged to Final Assembly by Materials Fabrication is to be determined. Outside market prices for the subcomponents are available. Which of the following is the most correct statement regarding a market-based transfer price?

- A. Marginal production cost transfer prices provide incentives to use otherwise idle capacity.
- B. Market transfer prices provide an incentive to use otherwise idle capacity.
- C. Overall long term competitiveness is enhanced with a market-based transfer price.
- D. Corporate politics is more of a factor in a market-based transfer price than with other methods.

Answer (C) is correct.

A transfer price is the price charged in an intercompany transaction. Market-based prices provide market discipline because efficient internal suppliers will tend to prosper, thereby enhancing the overall long-term competitiveness of the firm.

- A . Marginal production cost transfer prices do not relate to market-based transfer prices.
- B . Marginal cost based transfer prices provide more of an incentive to the purchasing division to buy internally and thus use idle facilities of the selling division than does the usually higher market-based transfer price.
- D . Corporate politics is less of a factor than in other methods, such as a negotiated transfer price. Market-based prices are objective.

Question: 87 A carpet manufacturer maintains a retail division consisting of stores stocking its brand and other brands, and a manufacturing division that makes carpets and pads. An outside market exists for carpet padding material in which all padding produced can be sold. The proper transfer price for padding transferred from the manufacturing division to the retail division is

- A. Variable manufacturing division production cost.
- B. Variable manufacturing division production cost plus allocated fixed factory overhead.
- C. Variable manufacturing division production cost plus variable selling and administrative cost.
- D. The market price at which the retail division could purchase padding.

Answer (D) is correct.

The three basic criteria that the transfer pricing system in a decentralized company should satisfy are to (1) provide information allowing central management to evaluate divisions with respect to total company profit and each division's contribution to profit, (2) stimulate each manager's efficiency without losing each division's autonomy, and (3) motivate each divisional manager to achieve his or her own profit goal in a manner contributing to the company's success. The market price should be used as the transfer price to avoid waste and maximize efficiency in a competitive economy (an outside market in which all padding produced can be sold). This price also measures the product's profitability and the division managers' performance in a competitive environment.

A . The market price will better achieve the goals of a transfer pricing system. The selling division would not have as strong an incentive to control costs if some variant of actual cost is used. The efficiency of the purchasing division is also promoted when it must treat the selling division as if it were an independent vendor.

B . The market price will better achieve the goals of a transfer pricing system. The selling division would not have as strong an incentive to control costs if some variant of actual cost is used.

C . The market price will better achieve the goals of a transfer pricing system. The selling division would not have as strong an incentive to control costs if some variant of actual cost is used.

Question: 88 Companies with decentralized, autonomous divisions that sell their goods and services internally to other divisions of the company as well as externally in competitive markets have to establish transfer prices for the goods and services transferred internally among divisions. Generally, upper management has established such operating criteria for managing the divisions as goal congruence, subunit autonomy, and a sustained high level of management effort. An approach consistent with the above criteria would be to set the transfer price equal to the

A. Additional outlay cost per unit incurred to the point of transfer plus the opportunity cost per unit to the supplying division.

B. Additional outlay cost per unit incurred to the point of transfer plus the opportunity cost per unit to the buying division.

C. Full cost per unit incurred to the point of transfer plus a percentage markup on the full cost per unit.

D. Variable cost per unit incurred to the point of transfer.

Answer (A) is correct.

The outlay costs represent cash outflows related to the production and transfer of goods/services. The opportunity costs are the maximum contribution forgone by the supplying division if the goods/services are sold internally. An opportunity cost will exist if the supplier has no idle capacity and an external market exists. Thus, this guideline should promote goal congruence (actions of the divisional manager benefit the company and the division), a sustained high level of managerial effort (exertion toward a goal), and subunit autonomy (freedom in decision making). The guideline will vary depending on whether an external market exists and whether the supplier has idle capacity.

B . The opportunity cost of the buying division is irrelevant.

C . The full cost may not represent the outlay cost incurred to the point of transfer, and a markup is an arbitrary percentage. The result may be suboptimization. For example, the buyer may purchase at a lower price from an outside supplier even though the price exceeds the company's outlay cost.

D . If the supplying division recovers only its variable production costs, it becomes a cost center for internal transfers. The supplying division will earn no return on internal sales, which could lead to suboptimization.

Question: 89 A large manufacturing company has several autonomous divisions that sell their products in perfectly competitive external markets as well as internally to the other divisions of the company. Top management expects each of its divisional managers to take actions that will maximize the organization's goals as well as their own goals. Top management also promotes a sustained level of management effort of all of its divisional managers. Under these circumstances, for products exchanged between divisions, the transfer price that will generally lead to optimal decisions for the manufacturing company would be a transfer price equal to the

- A. Full cost of the product.
- B. Full cost of the product plus a markup.
- C. Variable cost of the product plus a markup.
- D. Market price of the product.

Answer (D) is correct.

A market price transfer price promotes goal congruence and a sustained level of management effort. It is also consistent with divisional autonomy. A market transfer price is most appropriate when the market is competitive, interdivisional dependency is low, and buying in the market involves no marginal costs or benefits.

A . A transfer at full cost means that the selling division will not make a profit. In addition, the selling division may be forgoing profits that could be obtained by selling to outside customers. Thus, full-cost transfer prices can lead to suboptimal decisions.

B . A transfer at full cost plus markup results in no incentive for the selling division to control its costs. Hence, a sustained level of management effort may not be maintained.

C . A transfer at variable cost plus markup has the same weaknesses as full cost plus markup.

Question: 90 The Eastern Division sells goods internally to the Western Division of the same company. The quoted external price in industry publications from a supplier near Eastern is US \$200 per ton plus transportation. It costs US \$20 per ton to transport the goods to Western. Eastern's actual market cost per ton to buy the direct materials to make the transferred product is US \$100. Actual per ton direct labor is US \$50. Other actual costs of storage and handling are US \$40. The company president selects a US \$220 transfer price. This is an example of

- A. Market-based transfer pricing.
- B. Cost-based transfer pricing.

- C. Negotiated transfer pricing.
- D. Cost-plus-20% transfer pricing.

Answer (A) is correct.

A transfer price is the price charged by one segment of an organization for a product or service supplied to another segment of the same organization. The three basic criteria that the transfer pricing system in a decentralized company should satisfy are to (1) provide information allowing central management to evaluate divisions with respect to total company profit and each division's contribution to profit, (2) stimulate each manager's efficiency without losing each division's autonomy, and (3) motivate each divisional manager to achieve his or her own profit goal in a manner contributing to the company's success. Because the US \$220 transfer price selected is based on the quoted external price (market), it is an example of market-based transfer pricing.

- B . The cost-based price would be US \$210 ($\$100 + \$50 + \$40 + \20).
- C . No negotiations took place.
- D . Cost plus 20% would be US \$252 ($\210×1.20).

Question: 91 Division Z of a company produces a component that it currently sells to outside customers for US \$20 per unit. At its current level of production, Division Z's total cost of producing this component is US \$17 per unit. Division Y of the same company would like to purchase this component from Division Z. Division Z has enough excess capacity to fill Division Y's requirements. The managers of both divisions are compensated based upon reported profits. Which of the following transfer prices will be beneficial to the managers of both Division Y and Division Z?

- A. US \$12 per unit.
- B. US \$18 per unit.
- C. US \$20 per unit.
- D. US \$22 per unit.

Answer (B) is correct.

A unit price of US \$18 is less than Division Y's cost of purchase from an outside supplier (\$20) but exceeds Division Z's production cost (\$17). Accordingly, both Y and Z benefit.

- A . At US \$12 per unit, Division Z would not recover its total cost.
- C . At US \$20 per unit, Division Y may be indifferent as to whether it purchases internally or externally. Buying from an outside source for US \$20 per unit is contrary to the company's interests given idle capacity available for the component's manufacture and an incremental unit cost of US \$20.

D . At US \$22 per unit, Division Y would have an incentive to purchase from an external supplier (i.e., market price is US \$20).

Question: 92 Division A of a company is currently operating below capacity. It produces a single product and sells all its production to outside customers for US \$13 per unit. Variable costs are US \$7 per unit at the current production level. Division B, which currently purchases this product from an outside supplier for US \$12 per unit, would like to purchase the product from Division A. Division A can meet outside customers' and Division B's demand without exceeding capacity. What is the minimum price that Division A should charge Division B for this product?

- A. US \$7.00 per unit.
- B. US \$10.40 per unit.
- C. US \$12.00 per unit.
- D. US \$13.00 per unit.

Answer (A) is correct.

From the seller's perspective, the price should reflect at least its incremental cash outflow (variable cost) plus opportunity cost (the contribution from an outside sale). Because A has idle capacity, the opportunity cost is 0. Thus, the minimum price Division A should charge Division B is US \$7.00.

B . The minimum price that Division A should charge Division B is not equal to the price that Division A would charge outside customers (\$13) multiplied by 80%.

C . The minimum price that Division A should charge Division B is not equal to the price that Division B would pay to an outside supplier.

D . Division A should not include any fixed costs in its transfer price because it has idle capacity.

Question: 93 Which of the following is not true about international transfer prices for a multinational firm?

- A. Allows firms to attempt to minimize worldwide taxes.
- B. Allows the firm to evaluate each division.
- C. Provides each division with a profit-making orientation.
- D. Allows firms to correctly price products in each country in which it operates.

Answer (D) is correct.

The calculation of transfer prices in the international arena must be systematic. A scheme for calculating transfer prices for a firm may correctly price the firm's product in Country A but not in Country B. The product may be overpriced in Country B, causing sales to be lower than anticipated. Alternatively, the

product may be underpriced in Country B, and the authorities may allege that the firm is dumping its product there.

A . Properly chosen transfer prices allow firms to attempt to minimize worldwide taxes by producing various parts of the products in different countries and strategically transferring the parts at various systematically calculated prices.

B . Properly chosen transfer prices allocate revenues and expenses to divisions in various countries. These numbers are used as part of the input for the performance evaluation of each division.

C . Transfer prices motivate division managers to buy parts and products (from either internal or external suppliers) at the lowest possible prices and to sell their products (to either internal or external customers) at the highest possible prices. Hence, each division has a profit making orientation.

Question: 94 A domestic company has sales divisions in country X and country Y. The company sells only one product. There are no trade barriers or tariffs among the three countries. Information specific to each of the three countries is as follows:

<u>Country</u>	<u>Corporate Tax Rate</u>
Home	50%
X	60%
Y	40%

When selling items to its sales division(s) in <List A>, the company should set the <List B> allowable transfer price.

	<u>List A</u>	<u>List B</u>
A.	Countries X and Y	Highest
B.	Countries X and Y	Lowest
C.	Country X	Highest
D.	Country Y	Highest

Answer (C) is correct.

Country X has a higher tax rate than the home country, so the incentive is to transfer profits out of country X. The sales division in country X will be less profitable and pay a lower tax if it is charged a high transfer price.

A . Country X has a higher tax rate than the home country and country Y has a lower tax rate. The transfer pricing incentives will be different for the two sales divisions.

B . Country X has a higher tax rate than the home country and country Y has a lower tax rate. The transfer pricing incentives will be different for the two sales divisions.

D . Country Y has a lower tax rate than the home country, so the incentive is to transfer profits into country Y by charging that sales division a low transfer price.

Question: 95 A firm ships its product to a foreign subsidiary and charges a price that may increase import duties but lower the income taxes paid by the subsidiary. The most likely reason for these effects is that the

A. Price is an arm's-length price.

B. Price is a cost-plus price.

C. Transfer price is too low.

D. Transfer price is too high.

Answer (D) is correct.

A transfer price is the price charged by one subunit of a firm to another. When the subsidiary-buyer is in a foreign country, the higher the transfer, the higher the potential tariffs. However, the tax levied on a subsequent sale by the subsidiary will be lower because of its higher acquisition cost.

A . An arm's-length price is what a competitor would charge in that market.

B . A cost-plus price does not necessarily trigger higher import duties.

C . If the transfer price is too low, import duties would be lower and taxes would be higher.

Question: 96 Which of the following statements is true with respect to international transfer pricing?

A. Transfer prices charged to foreign subsidiaries must be the same as those charged to domestic subsidiaries.

B. The existence of tariffs in the foreign country may necessitate that a higher transfer price be charged a foreign subsidiary.

C. Limitations on taking profits out of a foreign country can be avoided by charging the foreign subsidiary a higher transfer price.

D. Currency restrictions prohibit payments to foreign vendors.

Answer (C) is correct.

Transfer pricing is an important aspect of the tax calculation for multinational corporations that transfer inventories between branches in different countries. Transfer prices charged to foreign subsidiaries may differ substantially from those charged to domestic subsidiaries for a variety of reasons. Limitations on taking profits out of a foreign country can be avoided by charging the foreign subsidiary a higher transfer price so that little or no profit exists to be repatriated.

A . Transfer prices charged to foreign subsidiaries are often quite different from those charged domestic subsidiaries.

B . The existence of tariffs in the foreign country would necessitate that a lower transfer price be charged to avoid a high tariff.

D . Currency restrictions may limit transfer of profits to foreign vendors.

Question: 97 An entity produces a good in country A and sells some of its output in country B. Selling prices are identical in the two countries. The corporate tax rates are 40% in country A and 20% in country B. Assuming that the entity does not increase or decrease production, it should <List A> sales in country B and set as <List B> a transfer price as possible, in order to minimize global taxes.

	<u>List A</u>	<u>List B</u>
A.	Maximize	High
B.	Maximize	Low
C.	Minimize	High
D.	Minimize	Low

Answer (B) is correct.

The tax-minimizing strategy is to minimize taxable income where tax rates are high and to maximize taxable income where tax rates are low. Consequently, the entity should sell more in country B but set a low transfer price. This dual strategy minimizes sales and profits in country A, minimizes cost of sales in country B, and maximizes sales and profits in country B.

A . If selling prices are identical, the tax-minimizing strategy involves maximizing sales in country B. However, to report the highest possible profits in the lower tax country, input costs must be minimized. The transfer price paid to the production facility in country A must therefore be set as low as possible.

C . A strategy of minimizing sales in country B and maximizing reported cost of goods sold in country B would result in the lowest reported profit in the lower tax country, thereby maximizing taxes paid.

D . The tax-minimizing strategy involves maximizing sales revenue in the lower tax country, not minimizing it.

PART 3 UNIT 13

1.Many companies recognize three major categories of costs of manufacturing a product. These are direct materials, direct labor, and overhead. Which of the following is an overhead cost in the production of an automobile?

- A.The cost of small tools used in mounting tires on each automobile.
- B.The cost of the tires on each automobile.
- C.The cost of the laborers who place tires on each automobile.
- D.The delivery costs for the tires on each automobile.

Answer (A) is correct.

The cost of small tools used in mounting tires cannot be identified solely with the manufacture of a specific automobile. This cost should be treated as manufacturing overhead because it is identifiable with the production process.

- B.Tire costs are readily and directly identifiable with each automobile and thus are direct materials costs.
- C.The cost of the laborers who place tires on each automobile is readily and directly identifiable with each automobile. Thus, it is a direct labor cost.
- D.Delivery costs are readily and directly identifiable with the tires delivered. Thus, they are direct materials costs.

2.Which of the following is a product cost for a manufacturing company?

- A.Insurance on the corporate headquarters building.
- B.Property taxes on a factory.
- C.Depreciation on a salesperson's vehicle.
- D.The salary of a sales manager.

Answer (B) is correct.

Product costs such as material, labor, and overhead attach to the product and are carried in future periods if the revenue from the product is recognized in subsequent periods. Period costs are expensed immediately because no direct relationship between cost and revenue exists.

- A.Insurance on the corporate headquarters building is not a cost of production and is therefore a period cost.
- C.Depreciation on salespersons' vehicles is not a cost of production and is therefore a period cost.
- D.The salary of a sales manager is not a cost of production and is therefore a period cost.

3.In a traditional manufacturing operation, direct costs would normally include

- A.Machine repairs in an automobile factory.
- B.Electricity in an electronics plant.
- C.Wood in a furniture factory.
- D.Commissions paid to sales personnel.

Answer (C) is correct.

Direct costs are readily identifiable with and attributable to specific units of production. Wood is a direct material (a direct cost) of furniture.

- A.Machine repairs in an automobile factory are usually an overhead (indirect) cost.
- B.Electricity in an electronics plant is usually an overhead (indirect) cost.
- D.Sales commissions are period costs. They are neither direct nor indirect costs of products.

4.If a product required a great deal of electricity to produce, and crude oil prices increased, which of the following costs most likely increased?

- A.Direct materials.
- B.Direct labor.
- C.Prime costs.

D. Conversion costs.

Answer (D) is correct.

Conversion costs consist of direct labor and manufacturing overhead. Overhead includes the costs of utilities, such as electricity. An increase in the price of crude oil, which is used to generate electricity, is therefore likely to increase conversion costs.

A. Direct materials are tangible inputs to the manufacturing process that can feasibly be traced to the product. Electricity is not a direct material.

B. Direct labor is the cost of human labor that can feasibly be traced to the product. Electricity is not direct labor.

C. Prime costs equal direct materials plus direct labor. Because electricity is neither a direct material nor direct labor, electricity is not a prime cost.

5. Which one of the following best describes direct labor?

A. A prime cost.

B. A period cost.

C. A product cost.

D. Both a product cost and a prime cost.

Answer (D) is correct.

Direct labor is both a product cost and a prime cost. Product costs are incurred to produce units of output and are deferred to future periods to the extent that output is not sold. Prime costs are the direct cost of manufacturing, for example, direct materials and direct labor.

A. Direct labor is also a product cost.

B. A period cost is expensed when incurred. Direct labor cost is inventoriable.

C. Direct labor is also a prime cost.

6. An example of a direct labor cost is wages paid to a

	Factory Machine Operator	Supervisor in a Factory
A.	No	No
B.	No	Yes
C.	Yes	Yes
D.	Yes	No

Answer (D) is correct.

Direct labor costs are wages paid to labor that can be specifically identified with the production of finished goods. Because the wages of a factory machine operator are identifiable with a finished product, those wages are considered a direct labor cost. Because the supervisor's salary is not identifiable with the production of finished goods, it is a part of manufacturing overhead and thus not a direct labor cost.

A. The machine operator's wages are directly identifiable with the production of finished goods.

B. The machine operator's wages are directly identifiable with the production of finished goods, while the salary of a factory supervisor is not.

C. The salary of a factory supervisor is not directly identifiable with the production of finished goods.

7. In cost terminology, conversion costs consist of

A. Direct and indirect labor.

B. Direct labor and direct materials.

C. Direct labor and manufacturing overhead.

D. Indirect labor and variable manufacturing overhead.

Answer (C) is correct.

Conversion costs consist of direct labor and manufacturing overhead. These are the costs of converting direct materials into a finished product.

A. All manufacturing overhead is included in conversion costs, not just indirect labor.

B. Direct materials are not an element of conversion costs; they are a prime cost.

D. Direct labor is also an element of conversion costs.

8. Which of the following types of costs are prime costs?

A. Direct materials and direct labor.

B. Direct materials and overhead.

C. Direct labor and overhead.

D. Direct materials, direct labor, and overhead.

Answer (A) is correct.

Prime costs for a manufacturer are direct materials and direct labor.

B. Overhead is a conversion cost.

C. Direct labor and overhead are conversion costs.

D. Direct labor and overhead are conversion costs.

9. Direct materials cost is a

	<u>Conversion Cost</u>	<u>Prime Cost</u>
A.	No	No
B.	No	Yes
C.	Yes	Yes
D.	Yes	No

Answer (B) is correct.

Direct materials and direct labor are a manufacturer's prime costs. Conversion cost consists of direct labor and manufacturing overhead.

A. Direct materials cost is a prime cost.

C. Direct materials cost is not a conversion cost.

D. Direct materials cost is a prime cost but not a conversion cost.

10. A company experienced a machinery breakdown on one of its production lines. As a consequence of the breakdown, manufacturing fell behind schedule, and a decision was made to schedule overtime to return manufacturing to schedule. Which one of the following methods is the proper way to account for the overtime paid to the direct laborers?

A. The overtime hours times the sum of the straight-time wages and overtime premium would be charged entirely to manufacturing overhead.

B. The overtime hours times the sum of the straight-time wages and overtime premium would be treated as direct labor.

C. The overtime hours times the overtime premium would be charged to repair and maintenance expense, and the overtime hours times the straight-time wages would be treated as direct labor.

D. The overtime hours times the overtime premium would be charged to manufacturing overhead, and the overtime hours times the straight-time wages would be treated as direct labor.

Answer (D) is correct.

Direct labor costs are wages paid to labor that can feasibly be specifically identified with the production of finished goods. Manufacturing overhead consists of all costs, other than direct materials and direct labor, that are associated with the manufacturing process. Thus, straight-time wages are treated as direct labor. However, because the overtime premium cost is a cost that should be borne by all production, the overtime hours times the overtime premium should be charged to manufacturing overhead.

- A. The straight-time wages times the overtime hours should still be treated as direct labor.
- B. Only the straight-time wages times the overtime hours is charged to direct labor.
- C. Labor costs are not related to repairs and maintenance expense.

11. Direct labor cost is a

	<u>Conversion Cost</u>	<u>Prime Cost</u>
A.	No	No
B.	No	Yes
C.	Yes	Yes
D.	Yes	No

Answer (C) is correct.

Direct labor is the only one of the three major categories of manufacturing cost that is both a prime cost and a conversion cost.

- A. Direct labor is both a conversion cost and a prime cost.
- B. Direct labor is also a conversion cost.
- D. Direct labor is also a prime cost.

12. Indirect labor is a

- A. Prime cost.
- B. Conversion cost.
- C. Period cost.
- D. Nonmanufacturing cost.

Answer (B) is correct.

Conversion costs include direct labor and manufacturing overhead. Because indirect labor is a component of manufacturing overhead, indirect labor is a conversion cost.

- A. Prime costs are direct materials and direct labor.
- C. Period costs are usually not identifiable with a particular product.
- D. Indirect labor constitutes a manufacturing cost.

13. The major objectives of any budget system are to

- A. Define responsibility centers, provide a framework for performance evaluation, and promote communication and coordination among organization segments.
- B. Define responsibility centers, facilitate the fixing of blame for missed budget predictions, and ensure goal congruence between superiors and subordinates.
- C. Foster the planning of operations, provide a framework for performance evaluation, and promote communication and coordination among organization segments.
- D. Foster the planning of operations, facilitate the fixing of blame for missed budget predictions, and ensure goal congruence between superiors and subordinates.

Answer (C) is correct.

A budget is a realistic plan for the future expressed in quantitative terms. The process of budgeting forces a company to establish goals, determine the resources necessary to achieve those goals, and anticipate future difficulties in their achievement. A budget also is a control tool because it establishes

standards and facilitates comparison of actual and budgeted performance. Because a budget establishes standards and accountability, it motivates good performance by highlighting the work of effective managers. Moreover, the nature of the budgeting process fosters communication of goals to company subunits and coordination of their efforts. Budgeting activities by entities within the company must be coordinated because they are interdependent. Thus, the sales budget is a necessary input to the formulation of the production budget. In turn, production requirements must be known before purchases and expense budgets can be developed, and all other budgets must be completed before preparation of the cash budget.

- A. Responsibility centers are determined prior to budgeting.
- B. Responsibility centers are determined prior to budgeting, budgets do not fix blame but rather measure performance, and goal congruence is promoted but not ensured by budgets.
- D. Budgets do not fix blame but rather measure performance, and goal congruence is promoted but not ensured by budgets.

14. One of the primary advantages of budgeting is that it

- A. Does not take the place of management and administration.
- B. Bases the profit plan on estimates.
- C. Is continually adapted to fit changing circumstances.
- D. Requires departmental managers to make plans in conjunction with the plans of other interdependent departments.

Answer (D) is correct.

A budget is a quantitative model of a plan of action developed by management. A budget functions as an aid to planning, coordination, and control. Thus, a budget helps management to allocate resources efficiently and to ensure that subunit goals are congruent with those of other subunits and of the organization.

- A. Budgeting, far from taking the place of management and administration, makes them even more important.
- B. Basing the profit plan on estimates is a necessity, not an advantage.
- C. Adaptation to changing circumstances is a commitment that upper management must make; it is not inherent in a budget.

15. The master budget

- A. Shows forecasted and actual results.
- B. Reflects controllable costs only.
- C. Can be used to determine manufacturing cost variances.
- D. Contains the operating budget.

Answer (D) is correct.

The operating and financial budgets are subsets of the master budget. Thus, quantified estimates by management from all functional areas are contained in the master budget. These results then are combined in a formal quantitative model recognizing the organization's objectives, inputs, and outputs.

- A. The master budget does not contain actual results.
- B. The master budget reflects all applicable expected costs, whether or not controllable by individual managers.
- C. The master budget is not structured to allow determination of manufacturing cost variances, which requires using the flexible budget and actual results.

16. While an operating budget is a key element in planning and control, it is not likely to

- A. Establish a commitment of company resources.
- B. Set out long-range, strategic concepts.
- C. Integrate organizational activities.
- D. Provide subsidiary planning information.

Answer (B) is correct.

Operating budgets seldom set out long-range strategic concepts because they usually deal with the quantitative allocation of people and resources. Strategic concepts are overall goals for the organization and are almost always stated in words.

- A. Budgets do commit company resources in that the allotment of scarce resources is the primary purpose of a budget.
- C. Budgets do integrate organizational activities. Failure of a budget to integrate activities will result in the budgeting of more or less materials and resources than are available to the organization.
- D. Subsidiary plans can be made directly from overall budgets.

17. Budgets are a necessary component of financial decision making because they help provide a(n)

- A. Efficient allocation of resources.
- B. Means to use all the firm's resources.
- C. Automatic corrective mechanism for errors.
- D. Means to check managerial discretion.

Answer (A) is correct.

A budget is a quantitative model of a plan of action developed by management. A budget functions as an aid to planning, coordination, and control. Thus, a budget helps management to allocate resources efficiently.

- B. Budgets are designed to use resources efficiently, not just use them.
- C. Budgets per se provide for no automatic corrections.
- D. Budgets are a management tool and are not designed to thwart managerial discretion.

18. Which of the following is the principal advantage of budgeting?

- A. Employee motivation.
- B. Performance evaluation.
- C. Forced planning.
- D. Communication.

Answer (C) is correct.

Managers in a formal budget setting are compelled to examine the future and be prepared to respond to future conditions. Without budgets, many operations would fail because of inadequate planning. Budgeting is therefore a form of discipline and coordination.

- A. Employee motivation is a significant but secondary purpose of budgets.
- B. Performance evaluation is a significant but secondary purpose of budgets.
- D. Communication is a significant but secondary purpose of budgets. Planning is the foundation of other managerial functions, such as communication.

19. Many companies use comprehensive budgeting in planning for the next year's activities. When both an operating budget and a financial budget are prepared, which one of the following is correct concerning the financial budget?

	Included in the Financial Budget		
	Capital Budget	Pro-forma Balance Sheet	Cash Budget
A.	Yes	No	Yes
B.	No	Yes	No
C.	Yes	Yes	Yes
D.	No	No	No

Answer (C) is correct.

In the financial budget, the emphasis is on obtaining the funds needed to purchase operating assets. It contains the capital budget, projected cash disbursement schedule, projected cash

- A.The pro forma balance sheet is part of the financial budget.
- B.The capital budget and cash budget are part of the financial budget.
- D.All three of these items are part of the financial budget.

20.The cash budget must be prepared before completing the

- A.Capital expenditure budget.
- B.Sales budget.
- C.Forecasted balance sheet.
- D.Production budget.

Answer (C) is correct.

The pro forma balance sheet is the balance sheet for the beginning of the period updated for projected changes in cash, receivables, inventories, payables, etc. Accordingly, it cannot be prepared until after the cash budget is completed because cash is a current asset reported on the balance sheet.

- A.The capital expenditure budget is an input necessary for the preparation of a cash budget.
- B.The sales budget is usually the first budget prepared.
- D.A production budget is normally prepared before the cash budget is started.

21.Which one of the following best describes the order in which budgets should be prepared when developing the annual master operating budget?

- A.Production budget, direct material budget, revenue budget.
- B.Production budget, revenue budget, direct material budget.
- C.Revenue budget, production budget, direct material budget.
- D.Revenue budget, direct material budget, production budget.

Answer (C) is correct.

The components of the operating budget are prepared in the following order: sales (revenue) budget, production budget, direct materials budget, direct labor budget, manufacturing overhead budget, ending finished goods inventory budget, cost of goods sold budget, and nonmanufacturing budget.

- A.The revenue budget must be completed before the other two can be prepared.
- B.The revenue budget must be completed before the production budget can be prepared.
- D.The production budget must be completed before the direct material budget can be prepared.

22.Which statement about a production budget is true?

- A.A retailer should use projected unit sales to estimate unit production.
- B.The production budget reflects numbers of units and product prices.
- C.To minimize carrying costs and obsolescence, the production budget process should begin with the cost budget.
- D.The production budget is made to ensure production meets sales demand and inventories are maintained at appropriate levels.

Answer (D) is correct.

The production budget is prepared to ensure that production meets sales demand and inventories are maintained at appropriate levels. It follows directly from the sales budget.

- A.A retailer prepares a purchases budget, not a production budget.
- B.The production budget includes units only. Product pricing is ignored because the purpose of a production budget is to plan output and inventory levels and the necessary manufacturing activity.
- C.The production budget process begins with the sales budget.

23. Which of the following is a true statement about operating budgets?

- A. Managers use operating budgets to do long-term planning.
- B. Production budget is the basis for all other budgets.
- C. Operating budgets are the basis for evaluating managers' performance.
- D. Operating budgeting is a qualitative expression of managers' expectations.

Answer (C) is correct.

Operating budgets are short-term planning and control methods. They are the basis for evaluating managers' performance. Sales budgets are the starting points for the cycle that produces the annual profit plan. Thus, they are the basis of all other budgets. Operating budgeting is a quantitative expression of managers' expectations.

- A. Operating budgets are short-term plans.
- B. Sales are starting points.
- D. Operating budgets are quantitative plans.

24. An internal auditor is reviewing the following proposed production budget that is based on the assumption of a Q1 beginning inventory of 10 units:

ABC, Inc., Production Budget					
For the Year Ended					
December 31, 20X1 (Y20X1)					
	Q1	Q2	Q3	Q4	Y20X1
Projected sales in units	200	400	500	700	1,800
Plus: Budgeted ending inventory	30	45	55	60	60
Total units needed	230	445	555	760	1,990
Minus: Beginning inventory	10	20	30	40	40
Units to be produced	220	425	525	720	1,950

Which of the following are errors in the table?

1. Annual total units needed should be 1,860.
2. Annual beginning inventory should be 10.
3. Units to be produced should be 1,850.
4. Beginning inventory amounts for Q2, Q3, and Q4 are misstated.

- A. 1 and 2 only.
- B. 1 and 3 only.
- C. 2, 3, and 4 only.
- D. 1, 2, 3, and 4.

Answer (D) is **correct**.
The correct table is presented below.

ABC, Inc., Production Budget					
For the Year Ended					
December 31, 20X1 (Y20X1)					
	Q1	Q2	Q3	Q4	Y20X1
Projected sales in units	200	400	500	700	1,800
Plus: Desired ending inventory	30	45	55	60	60
Total units needed	230	445	555	760	1,860
Minus: Beginning inventory	10	30	45	55	10
Units to be produced	220	415	510	705	1,850

- A. Annual units to be produced are 1,850 (1,800 projected annual unit sales + 60 units Q4 ending inventory – 10 units Q1 beginning inventory). Also, the beginning inventory amounts for Q2, Q3, and Q4 should be the ending amounts for Q1, Q2, and Q3, respectively.
- B. Annual beginning inventory is the Q1 beginning inventory given as 10 units. Also, the beginning inventory amounts for Q2, Q3, and Q4 should be the ending amounts for Q1, Q2, and Q3, respectively.
- C. Annual units needed should be 1,860 (1,800 + 60). Annual units needed is not the sum of the quarterly units needed.

25. Which of the following is a true statement about an overhead budget?

- A. Variable overhead contains elements that vary with the level of production, such as direct materials.
- B. The overhead budget reflects the nature of overhead as a fixed cost.
- C. Depreciation is an example of variable overhead.
- D. Some components of overhead should be allocated using a cost driver.

Answer (D) is correct.

Overhead is usually separated into variable and fixed overhead. Variable overhead, such as indirect labor and indirect materials, should be allocated using a cost driver.

- A. The overhead budget does not include direct materials and direct labor.
- B. The manufacturing overhead budget reflects the nature of overhead as a mixed cost, not a fixed cost.
- C. Depreciation is an example of fixed overhead. It remains the same regardless of the level of production.

26. Which is least likely to be considered when developing a sales budget?

- A. New promotion activities of a major competitor.
- B. Sales volume in previous years.
- C. General economic conditions.
- D. Machinery maintenance cost.

Answer (D) is correct.

The sales budget is based on the sales forecast. Sales forecasters should consider (1) recent sales trends, (2) overall conditions in the economy and industry, (3) market research, (4) activities of competitors, and (5) credit and pricing policies. Machinery maintenance is an overhead cost that varies little from year to year. Machinery maintenance costs ordinarily do not need special attention.

- A. Activities of competitors should be considered.
- B. Sales trends should be considered.
- C. Overall conditions in the economy should be considered.

27. All of the following are considered operating budgets except the

- A. Sales budget.
- B. Materials budget.
- C. Production budget.
- D. Capital budget.

Answer (D) is correct.

The operating budget consists of all budgets that concern normal operating activities, including the sales budget, production budget, materials budget, direct labor budget, and factory overhead budget. The capital expenditures budget, which outlines needs for new capital investment, is not a part of normal operations.

- A. The sales budget is part of the operating budget.
- B. The direct materials budget is part of the operating budget.
- C. The production budget is part of the operating budget.

28. During the preliminary survey for an audit of one of an organization's manufacturing plants, an auditor discovers that the plant experiences production problems with costs far in excess of those budgeted and with finished goods inventory levels that are clearly excessive. Which of the following management control procedures would have best brought the problems to management's attention earlier?

- A. Implementing standard costing procedures at each plant, with a summary of variances reported to management on a weekly basis.
- B. Establishing perpetual inventory control procedures at each plant, with a report detailing any inventory items with levels in excess of two weeks' production provided to management on a weekly basis.
- C. Planning monthly production based on management forecasts, with a report comparing actual production with forecasted production and actual costs with budgeted costs provided to management on a weekly basis.
- D. Comparing actual sales with forecasted sales and budgeted gross margin with actual gross margin, with a report provided to management on a weekly basis.

Answer (C) is correct.

Comparing actual production with management forecasts detects whether finished goods inventory is excessive, and comparing actual costs with budgeted costs detects unfavorable cost variances.

- A. Standard costing detects unfavorable cost variances but not excess finished goods inventory.
- B. Perpetual inventory control procedures detect excess finished goods inventory but not unfavorable cost variances.
- D. Because cost of goods sold is a component of gross margin, comparing actual and budgeted sales and actual and budgeted gross margin procedures may detect unfavorable cost variances, not excess finished goods inventory.

29. Individual budget schedules are prepared to develop an annual comprehensive or master budget. The budget schedule that provides the necessary input data for the direct labor budget is the

- A. Sales forecast.
- B. Materials purchases budget.
- C. Schedule of cash receipts and disbursements.
- D. Production budget.

Answer (D) is correct.

A master budget typically begins with the preparation of a sales budget. The next step is to prepare a production budget. After the production budget has been completed, the next step is to prepare the direct labor, materials, and overhead budgets. Thus, the production budget provides the input necessary for the completion of the direct labor budget.

- A. The sales forecast is insufficient for completion of the direct labor budget.
- B. The materials purchases budget is not needed to prepare a direct labor budget.
- C. The schedule of cash receipts and disbursements cannot be prepared until after the direct labor budget has been completed.

30. A company has budgeted sales of 24,000 finished units for the forthcoming 6-month period. It takes 4 pounds of direct materials to make one finished unit. Given the following:

	Finished units	Direct materials (pounds)
Beginning inventory	14,000	44,000
Target ending inventory	12,000	48,000

How many pounds of direct materials should be budgeted for purchase during the 6-month period?

- A.48,000
- B.88,000
- C.92,000
- D.96,000

Answer (C) is correct.

Required production of finished units is 22,000 units (12,000 target ending inventory + 24,000 sales – 14,000 beginning inventory). Thus, 88,000 pounds of direct materials (22,000 × 4 pounds per unit) must be available. Required purchases of direct materials equal 92,000 pounds (48,000 target ending inventory + 88,000 usage – 44,000 beginning inventory).

- A.The target ending inventory is 48,000.
- B.The amount that must be available for production is 88,000 pounds of direct material. The desired 4,000-pound increase in direct materials inventory must also be added.
- D.The changes in finished goods and direct materials inventories were not considered.

31.The operating budget process usually begins with the

- A.Financial budget.
- B.Balance sheet.
- C.Income statement.
- D.Sales budget.

Answer (D) is correct.

For most firms, the starting point for the annual budget is the sales forecast. All other aspects of the budget, including production, costs, and inventory levels, rely on the sales figures.

- A.A financial budget cannot be prepared until after the sales budget has been completed.
- B.A balance sheet cannot be prepared until after the sales budget has been completed.
- C.An income statement cannot be prepared until after the sales budget has been completed.

32.The production budget process usually begins with the

- A.Direct labor budget.
- B.Direct materials budget.
- C.Manufacturing overhead budget.
- D.Sales budget.

Answer (D) is correct.

Neither a master budget nor a production budget can be prepared until after the sales budget has been completed

- A.The direct labor budget cannot be prepared until after unit production numbers have been compiled.
- B.The direct materials budget cannot be prepared until after the unit production numbers have been compiled.
- C.The manufacturing overhead budget cannot be prepared until after the unit production numbers have been compiled.

33.The major feature of zero-based budgeting (ZBB) is that it

- A.Takes the previous year's budgets and adjusts them for inflation.
- B.Questions each activity and determines whether it should be maintained as it is, reduced, or eliminated.
- C.Assumes all activities are legitimate and worthy of receiving budget increases to cover any increased costs.
- D.Focuses on planned capital outlays for property, plant, and equipment.

Answer (B) is correct.

ZBB is a planning process in which each manager must justify his or her department's full budget for each period. The purpose is to encourage periodic reexamination of all costs in the hope that some can be reduced or eliminated.

- A.Traditional or incremental budgeting takes the previous year's budgets and adjusts them for inflation.
- C.ZBB is a planning process in which each manager must justify his or her department's full budget for each period. The purpose is to encourage periodic reexamination of all costs in the hope that some can be reduced or eliminated.
- D.It is a definition of a capital budget.

34. Butteco has the following cost components for 100,000 units of product for the year just ended:

Raw materials	US \$200,000
Direct labor	100,000
Manufacturing overhead	200,000
Selling/administrative expense	150,000

All costs are variable except for US \$100,000 of manufacturing overhead and US \$100,000 of selling and administrative expenses. The total costs to produce and sell 110,000 units during the year are

- A.US \$650,000
- B.US \$715,000
- C.US \$695,000
- D.US \$540,000

Answer (C) is correct.

Direct (raw) materials unit costs are variable at US \$2 ($\$200,000 \div 100,000$ units). Similarly, direct labor has a variable unit cost of US \$1 ($\$100,000 \div 100,000$ units). The US \$200,000 of manufacturing overhead for 100,000 units is 50%. The variable unit cost is US \$1. Selling costs are US \$100,000 fixed and US \$50,000 variable for production of 100,000 units, and the variable unit selling expense is US \$0.50 ($\$50,000 \div 100,000$ units). The total unit variable cost is therefore US \$4.50 ($\$2 + \$1 + \$1 + \0.50). Fixed costs are US \$200,000. At a production level of 110,000 units, variable costs are US \$495,000 ($110,000 \text{ units} \times \4.50). Thus, total costs are US \$695,000 ($\$495,000 + \$200,000$).

- A.The amount of US \$650,000 is the cost at a production level of 100,000 units.
- B.The amount of US \$715,000 assumes a variable unit cost of US \$6.50 with no fixed costs.
- D.Total costs are US \$695,000 based on a unit variable cost of US \$4.50 each.

35. Which budgeting method considers work actions that add customer value and establishes a cost pool for each identifiable subset of those actions?

- A.Zero-based budgeting (ZBB).
- B.Activity-based budgeting (ABB).
- C.Kaizen budgeting.
- D.Continuous budgeting.

Answer (B) is correct.

An activity is a set of work actions undertaken within the entity, and a cost pool is established for each activity. Analysis identifies value-adding activities, which contribute to customer satisfaction. Non-value-adding activities should be reduced or eliminated. Activities are classified in a hierarchy according to the level of the production process where they occur.

- A.ZBB is a budget and planning process in which each manager must justify his or her department's entire budget every budget cycle.
- C.The Japanese term "kaizen" means continuous improvement, and kaizen budgeting assumes the continuous improvement of products and processes. It requires estimates of the effects of improvements and the costs of their implementation.

D.A continuous (rolling) budget is revised on a regular (continuous) basis. Typically, such a budget is continuously extended for an additional month or quarter in accordance with new data as the current month or quarter ends.

36.The procedure employed in zero-based budgeting is to

- A.Budget from the ground up whereby every proposed expenditure for every unit is reviewed as though the budget was being prepared for the very first time.
- B.Review the prior period's budget along with actual results for that period and the expectations for the coming period to develop more realistic budget amounts for the coming period.
- C.Require managers to establish priorities by including a description of what activities or changes would occur if the budget were increased and decreased by a fixed percentage amount.
- D.Ascertain the outputs that are desired and work backward to determine the amount of inputs that will be required to generate the desired outputs.

Answer (A) is correct.

Zero-based budgeting treats the budget as if it were being initiated for the first time. Thus, all costs are reexamined each period. Beginning with the smallest budgetary subunits, managers must determine objectives, operations, and costs for all activities. Alternative methods of conducting each activity are considered, different levels of service are evaluated for each activity, means of measuring work and performance are determined, and activities are ranked in order of importance to the organization.

- B.Reviewing the prior period's budget, actual results for that period, and the expectations for the coming period is incremental budgeting.
- C.Requiring managers to establish priorities in the event the budget is increased or decreased by a fixed percentage is priority incremental budgeting.
- D.Ascertaining desired outputs and necessary inputs is the input-output procedure for budget development.

37.Comparing actual results with a budget based on achieved volume is possible with the use of a

- A.Monthly budget.
- B.Master budget.
- C.Rolling budget.
- D.Flexible budget.

Answer (D) is correct.

A flexible budget is essentially a series of several budgets prepared for many levels of sales or production. At the end of the period, management can compare actual costs or performance with the appropriate budgeted level in the flexible budget. New columns can quickly be made by interpolation or extrapolation, if necessary. A flexible budget is designed to allow adjustment of the budget to the actual level of activity before comparing the budgeted activity with actual results.

- A.Comparing results using a monthly budget is no easier than using a budget of any other duration.
- B.A master budget is the overall budget. It will not facilitate comparisons unless it is also a flexible budget.
- C.A rolling (or continuous) budget is revised on a regular (continuous) basis. It will not facilitate comparisons unless it is also a flexible budget.

38.The major appeal of zero-based budgeting is that it

- A.Solves the problem of measuring program effectiveness.
- B.Relates performance to resource inputs by an integrated planning and resource-allocation process.
- C.Reduces significantly the time required to review a budget.
- D.Deals with some of the problems of the incremental approach to budgeting.

Answer (D) is correct.

The traditional approach to budgeting is to merely increase last year's amounts by a given percentage or increment. Zero-based budgeting divides programs into packages of goals, activities, and required resources. The cost of each package is then recalculated, without regard to previous performance.

- A. Zero-based budgeting is not primarily a measurement tool for program effectiveness.
- B. The relationship of performance to resource inputs by integrated planning and resource allocation is part of the PPBS, or planning-programming-budgeting system.
- C. Zero-based budgeting generally increases the time required to review a budget rather than reduces it; i.e., it consists of a determination of resources needed rather than an extrapolation of resources used in prior periods.

39. A company prepares a flexible budget each month for manufacturing costs. Formulas have been developed for all costs within a relevant range of 5,000 to 15,000 units per month. The budget for electricity (a semivariable cost) is US \$19,800 at 9,000 units per month, and US \$21,000 at 10,000 units per month. How much should be budgeted for electricity for the coming month if 12,000 units are to be produced?

- A. US \$26,400
- B. US \$25,200
- C. US \$23,400
- D. US \$22,200

Answer (C) is correct.

A flexible budget consists of a fixed cost component and a variable cost component. The fixed cost component can be expected to remain constant throughout the budget's relevant range. The variable cost component, however, will change at a constant rate within the budget's range. The increase in budgeted cost of US \$1,200 ($\$21,000 - \$19,800$) per 1,000 units of production can therefore be calculated as the variable cost per unit of US \$1.20 [$(\$21,000 - \$19,800) \div 1,000$] and the total fixed costs of US \$9,000 [$\$21,000 - (10,000 \times \$1.20)$]. These costs can then be used to determine the total cost of using 12,000 units of electricity [$\text{US } \$9,000 \text{ FC} + (12,000 \times \$1.20) = \$23,400$].

- A. The flexible budget for 12,000 units should be computed by determining the variable cost per unit of US \$1.20 [$(\$21,000 - \$19,800) \div 1,000$] and the total fixed costs of US \$9,000 [$\$21,000 - (10,000 \times \$1.20)$]. These costs can then be used to determine the total cost of using 12,000 units of electricity [$\text{US } \$9,000 \text{ FC} + (12,000 \times \$1.20)$].
- B. The flexible budget for 12,000 units should be computed by determining the variable cost per unit of US \$1.20 [$(\$21,000 - \$19,800) \div 1,000$] and the total fixed costs of US \$9,000 [$\$21,000 - (10,000 \times \$1.20)$]. These costs can then be used to determine the total cost of using 12,000 units of electricity [$\text{US } \$9,000 \text{ FC} + (12,000 \times \$1.20)$].
- D. US \$22,200 is arrived at by subtracting the increase in budgeted cost of US \$1,200.

40. There are many different budget techniques or processes that business organizations can employ. One of these techniques or processes is zero-based budgeting, which is

- A. Budgeting from the ground up as though the budget process were being initiated for the first time.
- B. Budgeting for cash inflows and outflows to time investments and borrowings in a way to maintain a bank account with a minimum balance.
- C. Using the prior year's budget as a base year and adjusting it based on the experiences of the prior year and the expectations for the coming year.
- D. Developing budgeted costs from clear-cut measured relationships between inputs and outputs.

Answer (A) is correct.

Zero-based budgeting (ZBB) is a planning process in which each manager must justify a department's entire budget every year (or period). Under ZBB, a manager must build the budget every year from a base of zero. All expenditures must be justified regardless of the variances from previous years' budgets. The objective is to encourage periodic reexamination of all costs in the hope that some can be reduced or eliminated. Different levels of service (work effort) are evaluated for each activity, measures of work and performance are established, and activities are ranked (prioritized) according to their importance to the entity. For each budgetary unit, decision packages are prepared that describe various levels of service that may be provided, including at least one level lower than the current one.

- B. Zero-balance banking involves budgeting for cash inflows and outflows to time investments and borrowings in a way to maintain a bank account with a minimum balance.

- C. Using the prior year's budget as a base year and adjusting it based on the experiences of the prior year and the expectations for the coming year is an incremental budget process.
- D. Developing budgeted costs from clear-cut measured relationships between inputs and outputs is an adaptation of the definition of engineered costs, which forms the basis for the input-output approach to budgeting.

41. A flexible budget is a quantitative expression of a plan that

- A. Is developed for the actual level of output achieved for the budget period.
- B. Is comprised of the budgeted income statement and its supporting schedules for a budget period.
- C. Focuses on the costs of activities necessary to produce and sell products and services for a budget period.
- D. Projects costs on the basis of future improvements in existing practices and procedures during a budget period.

Answer (A) is correct.

A flexible budget is a series of budgets prepared for many levels of activity. It is designed to allow adjustment of the budget to the actual level of activity before comparing the budgeted activity with actual results.

- B. This is the definition of an operating budget.
- C. This is the definition of activity-based budgeting.
- D. This is the definition of Kaizen budgeting.

42. A manufacturing firm has certain peak seasons; namely the Christmas season, the summer season, and the last 2 weeks of February. During these periods of increased output, the firm leases additional production equipment and hires additional temporary employees. Which of the following budget techniques would best fit this firm's needs?

- A. Flexible budgeting.
- B. Static budgeting.
- C. Zero-based budgeting.
- D. Project budgeting.

Answer (A) is correct.

A flexible budget is a series of several budgets prepared for many levels of sales. It is designed to allow adjustment of the budget to the actual level of activity before comparing the budgeted activity with actual results. A firm with peak seasons may prefer flexible budgeting because of its difficulties in predicting the activity level.

- B. A static budget is prepared for only one level of sales or production and is appropriate for a firm with little periodic variation in activity.
- C. Zero-based budgeting is a process by which each manager must justify his or her entire budget every period.
- D. Project or program budgeting is used for special projects or programs, not ongoing activities.

43. A static budget

- A. Drops the current month or quarter and adds a future month or a future quarter as the current month or quarter is completed.
- B. Presents a statement of expectations for a period but does not present a firm commitment.
- C. Presents the plan for only one level of activity and does not adjust to changes in the level of activity.
- D. Presents the plan for a range of activity so that the plan can be adjusted for changes in activity.

Answer (C) is correct.

A static budget plans for only one level of activity and does not provide for changed levels of activity.

- A. Budgets dropping the current month or quarter and adding a future month or quarter as the current month or quarter is completed are known as continuous budgets.
- B. A statement of expectations for a period without a firm commitment is a forecast.

D.A budget planning for a range of activities so the plan can be adjusted for a change in activity level is known as a flexible budget.

44.The flexible budget for a company may include

	<u>Direct Material Costs</u>	<u>Variable Selling Costs</u>
A.	Yes	No
B.	Yes	Yes
C.	No	Yes
D.	No	No

Answer (B) is correct.

Any variable cost component, such as direct materials or variable selling costs, can be budgeted on a flexible basis. A flexible budget, prepared after the budget period has ended, consists of the costs that should have been incurred given the actual level of production achieved.

- A.Flexible budgeting is appropriate for any variable cost component, including selling costs.
- C.Direct material costs are variable and thus appropriate for budgeting on a flexible basis.
- D.Both direct material and variable selling costs are variable; the assessment of performance for any variable cost can benefit from flexible budgeting.

45.If the government were to increase corporate tax rates, after-tax cost-volume-profit relationships for individual firms would change as follows

- A.Breakeven points would increase.
- B.Breakeven points would decrease.
- C.There would be no change in the breakeven points.
- D.There would be no change whatsoever in cost-volume-profit relationships.

Answer (C) is correct.

The firm owes no tax if it does not earn a profit. At the breakeven point, there is no profit. Thus, a tax increase would have no effect on a firm's breakeven point, which is calculated by dividing fixed costs by the contribution margin ratio. The contribution margin equals sales revenues minus total variable costs.

- A.A tax rate increase does not affect the breakeven point. At the breakeven point, profits equal zero.
- B.A tax rate increase does not affect the breakeven point. At the breakeven point, profits equal zero.
- D.The profit will be lower if the corporate tax rate is higher, for all firms operating above the breakeven point.

46.A company manufactures a single product. Estimated cost data regarding this product and other information for the product and the company are as follows:

the product and the company are as follows:

Sales price per unit	US \$40
Total variable production cost per unit	US \$24
Fixed costs and expenses:	
Manufacturing overhead	US \$5,598,720
General and administrative	US \$3,732,480

The number of units the company must sell in the coming year in order to reach its breakeven point is

- A.233,280 units.
- B.349,920 units.

- C. 583,200 units.
- D. 145,800 units.

Answer (C) is correct.

The breakeven point is determined by dividing total fixed costs by the unit contribution margin (UCM). The total fixed costs are US \$9,331,200 (\$5,598,720 manufacturing overhead + \$3,732,480 general and administrative). The UCM is US \$16 (\$40 sales price – \$24 variable production cost). Thus, the breakeven point is 583,200 units (US \$9,331,200 fixed costs ÷ \$16 UCM).

- A. Failing to subtract the variable costs per unit from the sales price results in 233,280 units.
- B. Failing to include general and administrative expenses in total fixed costs results in 349,920 units.
- D. Improperly adding variable cost per unit to sales price per unit results in 145,800 units.

47. A company has US \$450,000 per year of fixed production costs. The variable cost per unit is US \$15, and the unit selling price is US \$25. The breakeven volume in sales units for this company would be

- A. 11,250 units.
- B. 18,000 units.
- C. 30,000 units.
- D. 45,000 units.

Answer (D) is correct.

The breakeven volume in sales units equals fixed costs divided by the unit contribution margin (UCM). The breakeven point therefore is 45,000 units [US \$450,000 fixed costs ÷ (\$25 selling price – \$15 variable costs)].

- A. The amount of 11,250 units results from dividing fixed costs by US \$400.
- B. The amount of 18,000 units results from dividing fixed costs by unit price.
- C. The amount of 30,000 units equals fixed costs divided by unit variable cost.

48. Fact Pattern: Data regarding Year 1 operations for a manufacturer that had no beginning or ending inventories are as follows:

Sales (150,000 units)	US \$9,000,000
Variable costs	US \$4,050,000
Fixed costs	US \$1,520,640
Income tax rate	40%

The total contribution margin for Year 1 is

- A. US \$2,970,000
- B. US \$3,429,360
- C. US \$4,950,000
- D. US \$7,479,360

Answer (C) is correct.

The total contribution margin can be calculated as follows:

Sales (150,000 units)	US \$9,000,000
Variable costs	(4,050,000)
Contribution margin	<u>US \$4,950,000</u>

- A. The amount of US \$2,970,000 results from subtracting income tax.
- B. The amount of US \$3,429,360 results from subtracting both variable and fixed costs from sales.
- D. The amount of US \$7,479,360 results from subtracting fixed costs from sales rather than variable costs.

49.Fact Pattern: Data regarding Year 1 operations for a manufacturer that had no beginning or ending inventories are as follows:

Sales (150,000 units)	US \$9,000,000
Variable costs	US \$4,050,000
Fixed costs	US \$1,520,640
Income tax rate	40%

The manufacturer has US \$450,000 of variable selling expenses and US \$920,640 of fixed administrative expenses. What is the gross margin for Year 1 if all remaining costs are attributable to manufacturing?

- A. US \$3,429,360
- B. US \$3,879,360
- C. US \$4,350,000
- D. US \$4,800,000

Answer (D) is **correct**.
 The gross margin can be calculated as follows:

Sales (150,000 units)		US \$9,000,000
Variable manufacturing costs:		
Variable costs	US \$4,050,000	
Minus: Selling expenses	<u>(450,000)</u>	(3,600,000)
Fixed manufacturing costs:		
Fixed costs	US \$1,520,640	
Minus: Administrative expenses	<u>(920,640)</u>	<u>(600,000)</u>
Gross margin		<u><u>US \$4,800,000</u></u>

This computation would have been far more complex had there been beginning or ending finished goods or work-in-process inventories.

- A. The amount of US \$3,429,360 equals pretax operating income (revenue minus total costs).
- B. The amount of US \$3,879,360 equals the gross margin minus fixed administrative expenses.
- C. The amount of US \$4,350,000 equals the gross margin minus the variable selling expenses.

50.Fact Pattern: Data regarding Year 1 operations for a manufacturer that had no beginning or ending inventories are as follows:

Sales (150,000 units)	US \$9,000,000
Variable costs	US \$4,050,000
Fixed costs	US \$1,520,640
Income tax rate	40%

The breakeven point in unit sales for Year 1 is

- A. 36,495 units.
- B. 42,240 units.
- C. 46,080 units.
- D. 56,320 units

Answer (C) is **correct**.

The breakeven point in unit sales equals total fixed costs divided by the unit contribution margin (UCM).

Sales (150,000 units)	US \$9,000,000
Variable costs	(4,050,000)
Contribution margin	<u>US \$4,950,000</u>

The UCM is thus US \$33 (\$4,950,000 total contribution margin ÷ 150,000 units sold), and the breakeven point in unit sales is 46,080 (US \$1,520,640 fixed costs ÷ \$33 UCM).

- A. The amount of 36,495 units includes fixed manufacturing overhead and excludes variable selling expenses from the UCM calculation. It also excludes fixed selling expenses from the total fixed costs.
- B. The amount of 42,240 units excludes variable selling expenses from the UCM calculation.
- D. The amount of 56,320 units results from dividing total fixed costs by the total unit variable cost.

51. Fact Pattern: Data regarding Year 1 operations for a manufacturer that had no beginning or ending inventories are as follows:

Sales (150,000 units)	US \$9,000,000
Variable costs	US \$4,050,000
Fixed costs	US \$1,520,640
Income tax rate	40%

The manufacturer estimates that next year direct materials costs will increase by 10% and direct labor costs will increase by US \$0.60 per unit to US \$5.40 per unit. In addition, fixed selling expenses will increase by US \$29,520. All other costs will be incurred at the same rates or amounts as the current year. What dollar sales volume, to the nearest dollar, would be required in Year 2 to earn the same net income as in Year 1?

- A. US \$6,938,031
- B. US \$8,736,000
- C. US \$9,576,000
- D. US \$10,374,000

Answer (C) is **correct**.

To achieve the manufacturer's goal of the same net income in Year 2 as in Year 1, the same pretax operating profit must be achieved. Achieving the same pretax operating profit will require contribution margin to increase to cover the additional fixed selling expenses, calculated as follows:

Sales (150,000 units)		US \$9,000,000
Variable costs:		
Direct materials	US \$1,800,000	
Direct labor	720,000	
Manufacturing overhead	1,080,000	
Selling expenses	450,000	(4,050,000)
Year 1 contribution margin		US \$4,950,000
Additional fixed costs for Year 2		29,520
Year 2 target contribution margin		<u>US \$4,979,520</u>

This target contribution margin can be divided by the contribution margin ratio (unit contribution margin ÷ unit selling price) to arrive at the target level of sales. Year 1 per-unit amounts are calculated as follows:

	Year 1 Total	Year 1 Units	Year 1 per Unit
Selling price	US \$9,000,000 ÷	150,000 =	US \$60.00
Direct materials	1,800,000 ÷	150,000 =	12.00
Direct labor			5.40
Variable overhead	1,080,000 ÷	150,000 =	7.20
Variable selling expenses	450,000 ÷	150,000 =	3.00

Year 2 target unit contribution margin is thus US \$31.20 [\$60.00 selling price – (\$12.00 × 1.1 direct materials) – \$5.40 direct labor – \$7.20 variable overhead – \$3.00 variable selling expenses]. The Year 2 target contribution margin ratio is 52% (US \$31.20 ÷ \$60.00), and the Year 2 target sales volume is US \$9,576,000 (\$4,979,520 Year 2 target contribution margin ÷ .52 CMR).

- A. The amount of US \$6,938,031 includes net income instead of pretax operating income in the calculation.
- B. The amount of US \$8,736,000 omits the unit variable selling expense from the calculation of the total unit variable cost.
- D. The amount of US \$10,374,000 uses the variable cost ratio instead of the CMR.

52. Fact Pattern: Data regarding Year 1 operations for a manufacturer that had no beginning or ending inventories are as follows:

Sales (150,000 units)	US \$9,000,000
Variable costs	US \$4,050,000
Fixed costs	US \$1,520,640
Income tax rate	40%

The manufacturer estimates that next year direct materials costs will increase by 10% and direct labor costs will increase by US \$0.60 per unit to US \$5.40 per unit. In addition, fixed selling expenses will increase by US \$29,520. All other costs will be incurred at the same rates or amounts as the current year. What selling price would the company have to charge for its product in Year 2 to maintain the same contribution margin ratio as in Year 1?

- A. US \$61.80
- B. US \$64.00
- C. US \$64.50
- D. US \$72.00

Answer (B) is **correct**.

To achieve the manufacturer's goal of the same contribution margin ratio in Year 2 as in Year 1, the Year 1 per-unit contribution margin must first be calculated:

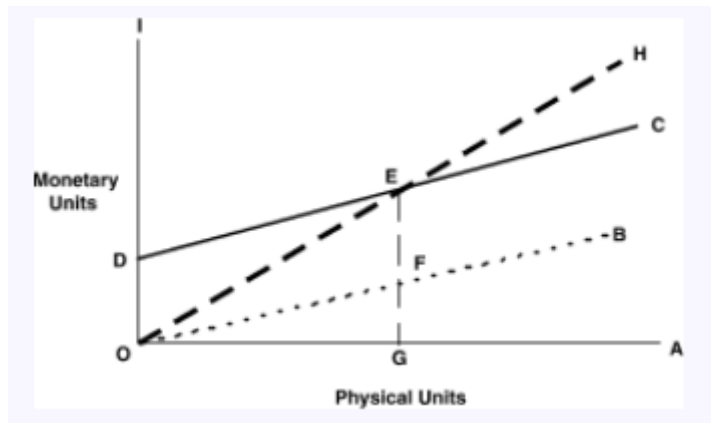
	Year 1 Total	Year 1 Units	Year 1 per Unit
Selling price	US \$9,000,000 ÷	150,000 =	US \$60.00
Direct materials	1,800,000 ÷	150,000 =	US \$12.00
Direct labor	720,000 ÷	150,000 =	4.80
Variable overhead	1,080,000 ÷	150,000 =	7.20
Variable selling expenses	450,000 ÷	150,000 =	3.00
Total variable costs			(27.00)
Contribution margin			<u>US \$33.00</u>

Based on this data, Year 2 target per-unit variable cost will be US \$28.80 [(\$12.00 × 1.1 direct materials) + \$5.40 direct labor + \$7.20 variable overhead + \$3.00 variable selling expenses]. The target contribution margin ratio for Year 2 is the Year 1 contribution margin divided by the Year 1 selling price (US \$33.00 ÷ \$60.00 = 55%). The new selling price can now be calculated using the formula for the contribution margin ratio:

$$\begin{aligned} \text{Contribution margin ratio} &= \text{Contribution margin} \div \text{Year 2 selling price} \\ .55 &= (\text{Year 2 selling price} - \text{US } \$28.80) \div \text{Year 2 selling price} \\ \text{Year 2 selling price} \times .55 &= \text{Year 2 selling price} - \text{US } \$28.80 \\ \text{Year 2 selling price} \times .45 &= \text{US } \$28.80 \\ \text{Year 2 selling price} &= \text{US } \$64.00 \end{aligned}$$

- A. The amount of US \$61.80 equals the original unit selling price plus the increase in the unit variable costs.
 C. The amount of US \$64.50 omits the unit variable selling costs from all calculations.
 D. The amount of US \$72.00 omits the unit variable selling costs from the calculation of the original unit variable cost.

53. Presented below is a cost-volume-profit chart for a firm. Various reference points are marked on the chart with letters.



The letters CEH on the chart represent the

- A. Total sales.
 B. Total expenses.
 C. Area of the chart where total sales exceed total expenses.
 D. Area of the chart where total expenses exceed total sales.

Answer (C) is correct.

A cost-volume-profit chart contains elements (lines, points, axes) that identify variable cost, fixed cost, the breakeven point, total revenue, profit, and volume in units. When the total sales revenue line (OH) rises above the total expense line (DC), a company will have positive net income.

- A. Line HEO represents total sales.
- B. Line CED represents total expenses.
- D. The loss area, i.e., the area of the chart where total expenses exceed sales, is represented by the area OED.

54. The most likely strategy to reduce the breakeven point would be to

- A. Increase both the fixed costs and the contribution margin.
- B. Decrease both the fixed costs and the contribution margin.
- C. Decrease the fixed costs and increase the contribution margin.
- D. Increase the fixed costs and decrease the contribution margin.

Answer (C) is correct.

A ratio can be reduced either by decreasing the numerator or increasing the denominator. The breakeven point in units equals fixed costs divided by the unit contribution margin. The breakeven point in sales dollars is the fixed costs divided by the contribution margin ratio. Because fixed costs are in the numerator and the contribution margin is in the denominator, decreasing the fixed costs and increasing the contribution margin reduces the breakeven point.

- A. Increasing the fixed costs increases the breakeven point.
- B. Decreasing the contribution margin increases the breakeven point.
- D. Increasing fixed costs and decreasing the contribution margin increases the breakeven point.

55. A retail company determines its selling price by marking up variable costs 60%. In addition, the company uses frequent selling price markdowns to stimulate sales. If the markdowns average 10%, what is the company's contribution margin ratio?

- A. 27.5%
- B. 30.6%
- C. 37.5%
- D. 41.7%

Answer (B) is correct.
 The selling price can be stated in terms of the unit variable cost (UVC):

$$\begin{aligned} \text{Selling price} &= \text{UVC} \times 1.6 \text{ markup} \times .90 \text{ markdown} \\ &= \text{UVC} \times 1.44 \end{aligned}$$

Substitution in the formula for contribution margin ratio (CMR) results in the following:

$$\begin{aligned} \text{CMR} &= \text{UCM} \div \text{Selling price} \\ &= (\text{Selling price} - \text{UVC}) \div \text{Selling price} \\ &= [(\text{UVC} \times 1.44) - \text{UVC}] \div (\text{UVC} \times 1.44) \\ &= (\text{UVC} \times .44) \div (\text{UVC} \times 1.44) \\ &= 30.56\% \end{aligned}$$

- A. Improperly omitting markdowns from the denominator results in 27.5%.
- C. Improperly omitting markdowns results in 37.5%.
- D. Improperly omitting markdowns from the numerator results in 41.7%.

56. Fact Pattern: A company that sells its single product for US \$40 per unit uses cost-volume-profit analysis in its planning. The company's after-tax net income for the past year was US \$1,188,000 after applying an effective tax rate of 40%. The projected costs for manufacturing and selling its single product in the coming year are in the next column.

the next column.

Variable costs per unit:	
Direct material	US \$ 5.00
Direct labor	4.00
Manufacturing overhead	6.00
Selling and administrative costs	3.00
Total variable cost per unit	<u>US \$18.00</u>
Annual fixed operating costs:	
Manufacturing overhead	US \$6,200,000
Selling and administrative costs	3,700,000
Total annual fixed cost	<u>US \$9,900,000</u>

The dollar sales volume required in the coming year to earn the same after-tax profit as the past year is

- A. US \$20,160,000
- B. US \$21,600,000
- C. US \$23,400,000
- D. US \$26,400,000

Answer (B) is **correct**.

Target pretax profit is calculated by dividing target after-tax profit by 1 minus the tax rate [US \$1,188,000 ÷ (1.0 - .40) = \$1,980,000]. This amount can be set equal to dollar sales (unit sales × unit selling price), minus total variable costs (unit sales × unit variable cost), minus total fixed costs to determine the breakeven point in units:

$$\begin{aligned}(Q \times \text{US } \$40) - (Q \times \$18) - \$9,900,000 &= \$1,980,000 \\ Q \times \text{US } \$22 &= \$11,880,000 \\ Q &= 540,000\end{aligned}$$

The target dollar sales volume is thus US \$21,600,000 (540,000 units × \$40).

- A. The amount of US \$20,160,000 does not adjust after-tax profit to pretax profit.
- C. The amount of US \$23,400,000 results from adjusting after-tax profit by dividing by the tax rate rather than one minus the tax rate.
- D. The amount of US \$26,400,000 results from equating the sum of the desired pretax profit and total fixed costs with total variable costs instead of the contribution margin.

57..Fact Pattern: A company that sells its single product for US \$40 per unit uses cost-volume-profit analysis in its planning. The company's after-tax net income for the past year was US \$1,188,000 after applying an effective tax rate of 40%. The projected costs for manufacturing and selling its single product in the coming year are in the next column.

the next column.

Variable costs per unit:	
Direct material	US \$ 5.00
Direct labor	4.00
Manufacturing overhead	6.00
Selling and administrative costs	3.00
Total variable cost per unit	<u>US \$18.00</u>
Annual fixed operating costs:	
Manufacturing overhead	US \$6,200,000
Selling and administrative costs	3,700,000
Total annual fixed cost	<u>US \$9,900,000</u>

The company has learned that a new direct material is available that will increase the quality of its product. The new material will increase the direct materials costs by US \$3 per unit. The company will increase the selling price of the product to US \$50 per unit and increase its marketing costs by US \$1,575,000 to advertise the higher-quality product. The number of units the company has to sell to earn a 10% before-tax return on sales is

- A. 337,500 units.
- B. 346,875 units.
- C. 425,000 units.
- D. 478,125 units.

Answer (D) is **correct**.
 Pretax profit (10% of dollar sales) can be set equal to dollar sales (unit sales × new selling price), minus total variable costs (increased by US \$3 per unit), minus total fixed costs (increased by US \$1,575,000) to determine the new breakeven point:

$$[(Q \times \text{US } \$50) \times .10] = (Q \times \text{US } \$50) - (Q \times \text{US } \$18) - (Q \times \text{US } \$3) - \$9,900,000 - \$1,575,000$$

$$Q \times \text{US } \$5 = (Q \times \text{US } \$29) - \$11,475,000$$

$$Q \times \text{US } \$24 = \$11,475,000$$

$$Q = 478,125$$

- A. The amount of 337,500 units results from using the wrong sign for the pretax profit.
- B. The amount of 346,875 units results from subtracting, not adding, the incremental marketing costs to determine total fixed costs.
- C. The amount of 425,000 units fails to adjust for the increase in direct materials costs.

58. A company has sales of US \$500,000, variable costs of US \$300,000, fixed costs of US \$50,000, and pretax profit of US \$150,000. If the company reduced fixed costs by 20% and left variable cost per unit and sales price unchanged, what would be the new breakeven point in sales dollars?

- A. US \$88,000
- B. US \$100,000
- C. US \$110,000
- D. US \$125,000

Answer (B) is **correct**.
 The new cost can be substituted in the formula for breakeven sales dollars and solved as follows:

$$\begin{aligned} \text{Breakeven point in dollars} &= \text{Fixed costs} \div \text{CMR} \\ &= (\text{US } \$50,000 \times .80) \div [(\$500,000 - \$300,000) \div \$500,000] \\ &= \text{US } \$40,000 \div [(\$500,000 - \$300,000) \div \$500,000] \\ &= \text{US } \$40,000 \div (\$200,000 \div \$500,000) \\ &= \text{US } \$40,000 \div 40\% \\ &= \text{US } \$100,000 \end{aligned}$$

- A. The amount of US \$100,000 does not reflect the new breakeven point in sales dollars.
- C. The amount of US \$110,000 does not reflect the new breakeven point in sales dollars.
- D. The amount of US \$125,000 ignores the change in fixed costs.

59. At the breakeven point, the contribution margin equals total

- A. Variable costs.
- B. Sales revenues.
- C. Selling and administrative costs.
- D. Fixed costs.

Answer (D) is correct.

No profit or loss occurs at the breakeven point. Thus, operating income equals zero, and fixed cost must equal the contribution margin (total revenue – total variable cost).

- A. Variable costs are used to determine the contribution margin.
- B. Sales revenues are used to determine the contribution margin.
- C. Selling and administrative costs may be fixed or variable.

60. If the fixed costs attendant to a product increase while variable costs and sales price remain constant, what will happen to contribution margin (CM) and breakeven point (BEP)?

	<u>CM</u>	<u>BEP</u>
A.	Increase	Decrease
B.	Decrease	Increase
C.	Unchanged	Increase
D.	Unchanged	Unchanged

Answer (C) is correct.

The BEP in units is equal to fixed costs divided by the UCM (unit selling price – variable cost per unit). Consequently, an increase in fixed costs has no effect on the CM but causes the BEP to increase; that is, more units must be sold to cover the increased fixed costs.

- A. Contribution margin is not affected by a change in fixed costs. Also, the BEP will increase.
- B. Contribution margin is not affected by a change in fixed costs.
- D. The BEP will increase. More units must be sold to cover the increased fixed costs.

61. Cost-volume-profit (CVP) analysis is used for all of the following except

- A. To understand the interaction of revenues with fixed and variable costs.
- B. To explain the effects of changes in assumptions about cost behavior.
- C. To control the effects of changes in sales volume.
- D. To determine the probable effects of changes in sales volume, sales price, and/or product mix.

Answer (C) is correct.

CVP analysis cannot be used to control the effects of changes in sales volume. It is only used to understand and explain them.

- A. CVP analysis is a tool for understanding the interaction of revenues with fixed and variable costs.
- B. CVP analysis explains the effects of changes in assumptions about cost behavior.
- D. CVP analysis can be used to determine the probable effects of changes in sales volume, sales price, and/or product mix.

62. Ducky's, Inc., manufactures rubber duck bath toys. Ducky's has total sales of US \$2.5 million and a breakeven point of US \$1.7 million. What is the company's margin of safety percentage?

- A. 8%
- B. 32%
- C. 68%
- D. 92%

Answer (B) is correct.

The margin of safety is the excess of sales over breakeven sales. The margin of safety in dollars is US \$800,000 ($\$2,500,000 - \$1,700,000$). The margin of safety percentage equals the margin of safety divided by total sales. Thus, the margin of safety percentage is 32% ($\$800,000 \div \$2,500,000$).

- A. The percentage of 8% assumes a margin of safety of \$200,000.

- C. The margin of safety is the excess of sales over breakeven sales. The margin of safety percentage equals the margin of safety in dollars, not the breakeven point, divided by total sales.
- D. The percentage of 92% assumes a margin of safety of \$2.3 million.

63. An organization wants to perform a cost-volume-profit (CVP) analysis. It knows the prices of products, their sales volume, and total fixed costs. What other information is needed?

- A. Total variable costs, intermediate product costs, and the product sales mix.
- B. Unit variable costs and the marginal cost of capital.
- C. Total variable costs, intermediate product costs, and the marginal cost of capital.
- D. Unit variable costs and the product sales mix.

Answer (D) is correct.

CVP analysis helps managers understand the interactions among (1) prices of products, (2) sales volume or activity level, (3) unit variable costs, (4) total fixed costs, and (5) product sales mix.

- A. CVP analysis is based on simplifying assumptions, e.g., that total fixed costs and unit variable cost are constant within the relevant range of activity and the specified time span. Accordingly, intermediate product costs are not relevant.
- B. The marginal cost of capital is a finance concept and is not used in CVP analysis.
- C. CVP analysis factors include unit variable costs and total fixed costs, not total variable costs, intermediate product costs, and the marginal cost of capital.

64. The assumptions underlying cost-volume-profit (CVP) analysis include which of the following?

- A. Unit selling prices and market conditions do not change as volume changes.
- B. The relationships between cost and revenue are nonlinear over a relevant range of activity and specified time span.
- C. Production exceeds sales, and no stockout costs are incurred.
- D. Unit variable costs change proportionally with volume.

Answer (A) is correct.

CVP analysis is a tool for understanding the interaction of revenues with fixed and variable costs. The analysis assumes that (1) unit selling prices and market conditions are constant, (2) cost and revenue relationships are predictable and linear, (3) these relationships are true over the relevant range of activity and specified time span, (4) production always equals sales, (5) total variable costs change proportionally with volume, and (6) unit variable costs are constant over the relevant range.

- B. Cost and revenue relationships are assumed to be predictable and linear over the relevant range of activity and the specified time span.
- C. Production is assumed to equal sales.
- D. Unit variable costs are assumed to be constant over the relevant range.

65. When applying the cost-benefit approach to a decision, the primary criterion is how well management goals will be achieved in relation to costs. Costs include all expected

- A. Variable costs for the courses of action but not expected fixed costs because only the expected variable costs are relevant.
- B. Costs that are common to all alternative courses of action as well as all incremental out-of-pocket costs.
- C. Future costs that are specific to each alternative, including opportunity cost and qualitative elements.
- D. Historical and future costs relative to the courses of action including all qualitative factors that cannot be measured in numerical terms.

Answer (C) is correct.

Marginal analysis is based on relevant costs. If costs do not vary with the option chosen, they are irrelevant. The maximum benefits forgone by using scarce resources for a given purpose are opportunity costs. They are relevant if they vary with the option chosen. Moreover, the decision may be

based on nonquantitative factors, for example, the desire to maintain a relationship with a vendor or to assume control over development of a product.

- A. Variable and fixed costs may be relevant or irrelevant.
- B. Expected incremental out-of-pocket expenses should be considered, but common costs should not.
- D. Historical costs are not relevant to cost-benefit analysis because they are sunk costs.

66. A manufacturing company's primary goals include product quality and customer satisfaction. The company sells a product, for which the market demand is strong, for US \$50 per unit. Due to the capacity constraints in the Production Department, only 300,000 units can be produced per year. The current defect rate is 12% (i.e., of the 300,000 units produced, only 264,000 units are sold and 36,000 units are scrapped). There is no revenue recovery when defective units are scrapped. The full manufacturing cost of a unit is US \$29.50, including

Direct materials	US \$17.50
Direct labor	4.00
Fixed manufacturing overhead	8.00

The company's designers have estimated that the defect rate can be reduced to 2% by using a different direct material. However, this will increase the direct materials cost by US \$2.50 per unit to US \$20 per unit. The net benefit of using the new material to manufacture the product will be

- A. US \$(120,000)
- B. US \$120,000
- C. US \$750,000
- D. US \$1,425,000

Answer (C) is correct.

If a different direct material is used, incremental revenue will be US \$1,500,000 $\{[(12\% \text{ defect rate} - 2\%) \times 300,000 \text{ units}] \times \$50\}$. Incremental cost will be US \$750,000 $(\$2.50 \times 300,000 \text{ units})$. Thus, the net benefit will be US \$750,000 $(\$1,500,000 - \$750,000)$.

- A. The amount of US \$(120,000) considers only the production costs of the good units sold. Moreover, it includes fixed overhead, a cost that is not affected by the choice of materials.
- B. The amount of US \$120,000 considers only the variable costs of the good units produced.
- D. The amount of US \$1,425,000 includes only the incremental direct materials cost of the increase in the number of good units produced.

67. A company plans to implement a bonus plan based on segment performance. In addition, the company plans to convert to a responsibility accounting system for segment reporting. The following costs, which have been included in the segment performance reports that have been prepared under the current system, are being reviewed to determine if they should be included in the responsibility accounting segment reports:

1. Corporate administrative costs allocated on the basis of net segment sales.
2. Personnel costs assigned on the basis of the number of employees in each segment.
3. Fixed computer facility costs divided equally among each segment.
4. Variable computer operational costs charged to each segment based on actual hours used times a predetermined standard rate; any variable cost efficiency or inefficiency remains in the computer department.

Of these four cost items, the only item that could logically be included in the segment performance reports prepared on a responsibility accounting basis would be the

- A. Corporate administrative costs.
- B. Personnel costs.
- C. Fixed computer facility costs.
- D. Variable computer operational costs.

Answer (D) is correct.

The variable computer cost can be included. The segments are charged for actual usage, which is under each segment's control. The predetermined standard rate is set at the beginning of the year and is known by the segment managers. Moreover, the efficiencies and inefficiencies of the computer department are not passed on to the segments. Both procedures promote a degree of control by the segments.

A. Corporate administrative costs should be excluded from the performance report. The segments have no control over their incurrence or the allocation basis. The allocation depends upon the segment sales (controllable) as well as the sales of other segments (uncontrollable).

B. The segments have no control over the incurrence of personnel costs or the method of assignment, which depends upon the number of employees in the segment (controllable) in proportion to the total number of employees in all segments (not controllable).

C. The segments have no control over fixed computer facility costs, and the equal assignment is arbitrary and bears no relation to usage.

68. In a responsibility accounting system, managers are accountable for

A. Variable costs but not for fixed costs.

B. Product costs but not for period costs.

C. Incremental costs.

D. Costs over which they have significant influence.

Answer (D) is correct.

The most desirable measure for evaluating a departmental manager is one that holds the manager responsible for the revenues and expenses (s)he can control. Controllability is the basic concept of responsibility accounting.

A. All variable costs may not be controllable, but some, if not all, fixed costs might be controllable.

B. Not all budgeted costs are controllable by managers.

C. All product costs may not be controllable, but some, if not all, period costs might be controllable.

69. Which of the following is not true of responsibility accounting?

A. Managers should only be held accountable for factors over which they have significant influence.

B. The focus of cost center managers will normally be more narrow than that of profit center managers.

C. Every factor that affects a firm's financial performance ultimately is controllable by someone, even if that someone is the person at the top of the firm.

D. When a responsibility account system exists, operations of the business are organized into separate areas controlled by individual managers.

Answer (C) is correct.

Responsibility accounting stresses that managers are responsible only for factors under their control. For this purpose, the operations of the business are organized into responsibility centers. Costs are classified as controllable and uncontrollable, implying that some revenues and costs can be changed through effective management. Management may then focus on deviations for either reinforcement or correction. Thus, the statement that every factor is ultimately controllable by someone is not a premise of responsibility accounting.

A. Responsibility accounting holds managers responsible only for what they can control.

B. A cost center manager is concerned with costs only, whereas a profit center manager is concerned with costs and revenues.

D. This is the essence of responsibility accounting. Each manager is held accountable for factors under their control.

70. The receipt of raw materials used in the manufacture of products and the shipping of finished goods to customers is under the control of the warehouse supervisor. The warehouse supervisor's time is spent approximately 60% on receiving activities and 40% on shipping activities. Separate staffs for the receiving and shipping operations are employed. The labor-related costs for the warehousing function are as follows:

Shipping operations are employed. The labor-related costs for a	
Warehouse supervisor's salary	US \$ 40,000
Receiving clerks' wages	75,000
Shipping clerks' wages	55,000
Employee benefit costs (30% of wage and salary costs)	51,000
	<u>US \$221,000</u>

The company employs a responsibility accounting system for performance reporting purposes. The costs are classified on the report as period or product costs. The total labor-related costs that would be listed on the responsibility accounting performance report as product costs under the control of the warehouse supervisor for the warehousing function would be

- A. US \$97,500
- B. US \$128,700
- C. US \$130,000
- D. US \$221,000

Answer (A) is correct.

The responsibility accounting report should list only the costs over which the warehousing supervisor exercises control. The supervisor's salary should therefore be excluded because it is controlled by the warehouse supervisor's superior. Moreover, only the product costs are to be considered. These exclude the shipping clerks' wages and fringe benefits because they are period costs (shipping is a selling expense). Thus, the only product cost under the control of the warehouse supervisor is the receiving clerks' wages (US \$75,000) and the related fringe benefits (US \$75,000 × 0.3 = \$22,500), or a total of US \$97,500.

- B. The product costs controlled by the supervisor total US \$97,500.
- C. The product costs controlled by the supervisor total US \$97,500.
- D. The product costs controlled by the supervisor total US \$97,500.

71. Making segment disclosures is an advantage to a company because it

- A. Facilitates evaluation of company management by providing data on particular segments.
- B. Eliminates the interdependence of segments.
- C. Masks the effect of intersegment transfers.
- D. Provides competitors with comparative information on the company's performance.

Answer (A) is correct.

Segment reporting is an aspect of responsibility accounting. It facilitates evaluation of company management and of the quality of the economic investment in particular segments.

- B. Interdependence of segments is not affected by reporting methods.
- C. Masking the effects of intersegment transfers is a disadvantage of segment reporting.
- D. Providing information to competitors is a disadvantage of segment reporting.

72. When comparing the residual income of several investment centers, the validity of comparisons may be destroyed by

- A. Peculiarities of each investment center.
- B. Differences in the relative amount of income.
- C. Consistent use of an imputed interest rate.
- D. Common amounts of invested capital for each investment center.

Answer (A) is correct.

Residual income is income of an investment center, minus an imputed interest charge for invested capital. The theory is that earning an income greater than residual income indicates that expansion is desirable. However, comparisons of investment centers based on residual income may be misleading because of differences in products, markets, costs, and local conditions.

- B. Comparisons are valid if adjustments are made for relative investment bases.
- C. Use of the same imputed interest rate provides a consistent objective against which each investment can be measured.
- D. Common amounts of invested capital would eliminate a major factor causing differences in residual income.

73. Overtime conditions and pay were recently set by the human resources department. The production department has just received a request for a rush order from the sales department. The production department protests that additional overtime costs will be incurred as a result of the order. The sales department argues that the order is from an important customer. The production department processes the order. To control costs, which department should never be charged with the overtime costs generated as a result of the rush order?

- A. Human resources department.
- B. Production department.
- C. Sales department.
- D. Shared by production department and sales department.

Answer (A) is correct.

The sales department should be responsible for the overtime costs because it can best judge whether the additional cost of the rush order is justified. The production department also may be held responsible for the overtime costs because charging the full overtime cost to the sales department would give the production department no incentive to control these costs. However, the human resources department would never be charged with the overtime costs because it has no effect on the incurrence of production overtime.

- B. To control costs, the production department may be charged with the overtime costs.
- C. To control costs, the sales department may be charged with the overtime costs.
- D. The sales department and the production department may be charged with the overtime costs.

74. Which of the following are purposes of a responsibility accounting system?

- 1) Encourage managerial effort to attain organizational objectives.
- 2) Motivate managers to make decisions consistent with organizational objectives.
- 3) Encourage cooperation among segments.
- 4) Provide a basis for managerial compensation.

- A. 1 and 2 only.
- B. 1, 2, and 3 only.
- C. 1, 2, and 4 only.
- D. 1, 2, 3, and 4.

Answer (C) is correct.

The purpose of a well-designed responsibility accounting system is to encourage managerial effort to attain organizational objectives, motivate managers to make decisions consistent with those objectives, and provide a basis for managerial compensation.

- A. Encouraging managerial effort to attain organizational objectives and motivating managers to make decisions consistent with those objectives are not the only listed purposes of a responsibility accounting system.
- B. Under a responsibility accounting system, a manager is only held responsible for those aspects of performance that (s)he can control. This does not encourage cooperation between segments.
- D. Encouraging cooperation between segments is not a purpose of a responsibility accounting system. On the contrary, managers are only held responsible for those aspects of performance that they can control.

75. A responsibility accounting system decentralizes an organization into the following types of responsibility centers:

- A. Cost and revenue centers only.
- B. Cost, profit, revenue, and administrative centers.
- C. Cost, profit, and revenue centers only.
- D. Cost, profit, revenue, and investment centers.

Answer (D) is correct.

Responsibility centers include cost, profit, revenue, and investment centers.

- A. Cost and revenue centers are not the only types of responsibility centers under responsibility accounting.
- B. Administrative centers are not a type of responsibility center.
- C. Cost, profit, and revenue centers are not the only types of responsibility centers under responsibility accounting.

76. A manufacturer using standard costing allocates overhead at a standard rate of US \$30 per direct labor hour (DLH). Actual overhead is US \$850,000, and 4 cost centers post the following actual direct labor hours for the period:

- 1: 6,000 DLH
- 2: 3,000 DLH
- 3: 7,000 DLH
- 4: 9,000 DLH

Overhead variances in excess of 10% should be prorated. Lesser amounts are immaterial and added or subtracted from cost of goods sold. Cost center 1 applied US \$36,000 to ending work-in-process (WIP) inventory, US \$54,000 to finished goods (FG) inventory, and US \$90,000 to cost of goods sold (COGS). Cost center 1 should record

- A. An increase COGS of US \$24,000.
- B. An increase in WIP of US \$3,600, an increase in FG of US \$5,400, and an increase in COGS of US \$9,000.
- C. An increase in WIP of US \$4,800, an increase in FG of US \$7,200, and an increase in COGS of US \$12,000.
- D. An increase in WIP of US \$20,000, an increase in FG of US \$30,000, and an increase in COGS of US \$50,000.

Answer (C) is correct.

Cost center 1 was allocated US \$180,000, cost center 2 was allocated US \$90,000, cost center 3 was allocated US \$210,000, and cost center 4 was allocated US \$270,000, a total of US \$750,000 in applied overhead. Given actual overhead of US \$850,000, underapplied overhead is US \$100,000. Because the variance exceeds 10% (US \$85,000) of actual overhead, the difference must be prorated. Cost center 1 assigned 20% of the allocated overhead to WIP (US \$36,000 ÷ US \$180,000). It also assigned 30% to FG (US \$54,000 ÷ US \$180,000) and 50% to COGS (US \$90,000 ÷ US \$180,000). Cost center 1 should be allocated 24% of the excess actual overhead [6,000 DLH ÷ (6,000 DLH + 3,000 DLH + 7,000 DLH + 9,000 DLH)]. Of the total variance, US \$24,000 is allocated to cost center 1 (US \$100,000 × 24%). Of this amount, US \$4,800 is assigned to WIP (US \$24,000 × 20%), US \$7,200 is assigned to FG (US \$24,000 × 30%), and US \$12,000 is assigned to COGS (US \$24,000 × 50%).

- A. The amount of the material overhead variance allocated to cost center 1 should be prorated among WIP, FG, and COGS.
- B. The appropriate reallocation percentages are 20% (WIP), 30% (FG), and 50% (COGS), but the amount to be reallocated is US \$24,000, not US \$18,000.
- D. The amount to be reallocated is US \$24,000, not US \$100,000, which is the total variance.

77. In a performance measurement system,

- A. Evaluations should be based on measures, all of which are solely within the manager's control.
- B. Controllable cost is synonymous with variable cost.
- C. The best performance measures pull a manager toward a specific result determined at the executive level.
- D. Goal congruence should promote suboptimization.

Answer (C) is correct.

Specific results determined at the executive level are the strategic goals of an entity. Accordingly, effective performance measures should promote goal congruence throughout the organizational controls.

A. Managers sometimes are responsible for costs that they do not directly and solely control but can influence.

B. Some costs that are commonly classified as fixed, e.g., depreciation may be controllable at higher levels of the organization.

D. Goal congruence throughout the organization promotes optimization.

PART 3 UNIT 14

Question: 1 An assembly plant accumulates its variable and fixed manufacturing overhead costs in a single cost pool, which is then applied to work in process using a single application base. The assembly plant management wants to estimate the magnitude of the total manufacturing overhead costs for different volume levels of the application activity base using a flexible budget formula. If there is an increase in the application activity base that is within the relevant range of activity for the assembly plant, which one of the following relationships regarding variable and fixed costs is true?

- A. The variable cost per unit is constant, and the total fixed costs decrease.
- B. The variable cost per unit is constant, and the total fixed costs increase.
- C. The variable cost per unit and the total fixed costs remain constant.
- D. The variable cost per unit increases, and the total fixed costs remain constant.

Answer (C) is correct.

Total variable cost changes when changes in the activity level occur within the relevant range. The cost per unit for a variable cost is constant for all activity levels within the relevant range. Thus, if the activity volume increases within the relevant range, total variable costs will increase. A fixed cost does not change when volume changes occur in the activity level within the relevant range. If the activity volume increases within the relevant range, total fixed costs will remain unchanged.

- A . The variable cost per unit and the total fixed costs are constant if the activity level increases within the relevant range.
- B . The variable cost per unit and the total fixed costs are constant if the activity level increases within the relevant range.
- D . The variable cost per unit and the total fixed costs are constant if the activity level increases within the relevant range.

Question: 2 A company is attempting to determine if there is a cause-and-effect relationship between scrap value and output produced. The following exhibit presents the company's scrap data for the last fiscal year:

Scrap as a Percent of Standard Monetary
Value of Output Produced

Month	Standard Monetary Value of Output	Percent Scrap (%)
Nov Year 7	US \$1,500,000	4.5
Dec Year 7	1,650,000	2.5
Jan Year 8	1,600,000	3.0
Feb Year 8	1,550,000	2.5
Mar Year 8	1,650,000	1.5
Apr Year 8	1,500,000	4.0
May Year 8	1,400,000	2.5
Jun Year 8	1,300,000	3.5
Jul Year 8	1,650,000	5.5
Aug Year 8	1,000,000	4.5
Sep Year 8	1,400,000	3.5
Oct Year 8	1,600,000	2.5

The company's scrap value in relation to the standard monetary value of output produced appears to be

- A. A variable cost.
- B. A fixed cost.
- C. A semi-fixed cost.
- D. Unrelated to the standard monetary value of output.

Answer (D) is correct.

Standard monetary units shipped and the percentage of scrap have no systematic relationship.

- A . A variable cost is a constant percentage of standard monetary units shipped.
- B . A fixed cost is a lower percentage when standard monetary units shipped were higher than when they were low.
- C . A semi-fixed cost as a percentage moves up and down with standard monetary units shipped, with a base level higher than 0%.

Question: 3 Which of the following is the best example of a mixed cost?

- A. A shipping agreement that includes a US \$1.40 shipping fee per unit sold and a monthly fee of US \$16,000.
- B. Payment of a flat fee of US \$3,000 per month to an advertising agency to promote products.
- C. The direct labor cost for the manufacturing of inventory of US \$2.10 per unit.
- D. Selling expenses for each unit of inventory of US \$0.78 per unit.

Answer (A) is correct.

Mixed (semivariable) costs combine fixed and variable elements. An example is a shipping agreement that includes a US \$1.40 shipping fee per unit sold (variable) and a monthly fee of US \$16,000 (fixed).

B . A monthly US \$3,000 fixed fee to an advertising agency is a fixed cost.

C . Direct labor costs per unit of inventory are variable costs.

D . Selling expenses for each unit of inventory are variable costs.

Fact Pattern: A company wants to determine its marketing costs for budgeting purposes. Activity measures and costs incurred for 4 months of the current year are presented in the table below. Advertising is considered to be a discretionary cost. Salespersons are paid monthly salaries plus commissions. The sales force was increased from 20 to 21 individuals during the month of May.

	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>
Activity measures:				
Sales orders	2,000	1,800	2,400	2,300
Units sold	55,000	60,000	70,000	65,000
Dollar sales	US \$1,150,000	US \$1,200,000	US \$1,330,000	US \$1,275,000
Marketing costs:				
Advertising	US \$ 190,000	US \$ 200,000	US \$ 190,000	US \$ 190,000
Sales salaries	20,000	20,000	21,000	21,000
Commissions	23,000	24,000	26,600	25,500
Shipping costs	93,000	100,000	114,000	107,000
Total costs	<u>US \$ 326,000</u>	<u>US \$ 344,000</u>	<u>US \$ 351,600</u>	<u>US \$ 343,500</u>

Question: 4 In relation to the monetary unit amount of sales, which of the following cost classifications is appropriate for advertising and sales salaries costs?

	<u>Advertising</u>	<u>Sales Salaries</u>
A.	Variable cost	Fixed cost
B.	Fixed cost	Variable cost
C.	Mixed cost	Mixed cost
D.	Fixed cost	Fixed cost

Answer (D) is correct.

Both advertising and sales salaries should be classified as fixed costs. The advertising was constant for 3 of the 4 months and would be considered fixed in terms of monetary unit sales. Sales salaries also did not vary with monetary unit sales.

- A . Advertising cost is considered fixed.
- B . Sales salaries are considered fixed in terms of monetary unit sales.
- C . Advertising and sales salaries are considered fixed costs in terms of monetary unit sales.

Question: 5 Which statement is false regarding the high-low method?

- A. The high-low method generates a regression line by basing the equation on only the highest and lowest values in a series of observations.
- B. The high-low method is used to estimate the fixed and variable portions of a mixed cost.
- C. One advantage of the high-low method is that the high and low points generally are representative of normal activity.
- D. The difference in cost between the highest and lowest levels of activity is divided by the difference in the activity level to determine the variable portion of the cost.

Answer (C) is correct.

The high-low method can be applied to calculate the two portions of a mixed cost. However, one disadvantage of this method is that the high and low points may not be representative of normal activity..

- A . The high-low equation uses only the highest and lowest observations.
- B . The high-low method estimates the fixed and variable portions of a mixed cost.
- D . The difference between the highest and lowest levels of activity is divided by the difference in activity to determine the unit variable cost.

Question: 6 Production levels are expected to increase within the relevant range. What are the anticipated effects on the following?

	<u>Fixed Costs per Unit</u>	<u>Variable Costs per Unit</u>
A.	Increase	Increase
B.	Increase	No change
C.	Decrease	Decrease
D.	Decrease	No change

Answer (D) is correct.

Fixed costs per unit decrease within the relevant range of activity as production increases because more units are available to absorb the constant amount of total fixed costs. Unit variable costs are assumed to remain the same per unit over the relevant range.

A . Fixed costs per unit decrease because there are more units to absorb the fixed costs and variable costs do not change over the relevant range.

B . Fixed costs per unit decrease because there are more units to absorb the fixed costs.

C . Variable costs per unit do not change over the relevant range.

Question: 8 The relevant range refers to the activity levels over which

A. Cost relationships hold constant.

B. Costs fluctuate.

C. Production varies.

D. Relevant costs are incurred.

Answer (A) is correct.

The relevant range defines the limits within which per-unit variable costs remain constant and fixed costs are not changeable. It is synonymous with the short run. The relevant range is established by the efficiency of a company's current manufacturing plant, its agreements with labor unions and suppliers, etc.

B . The relevant range refers to the activity levels over which cost relationships hold constant.

C . Production varies over both the relevant range (the short run) and the long run.

D . Relevant costs are those pertaining to a particular decision.

Question: 9 A company has discovered that the cost of processing customer invoices is strictly variable within the relevant range. Which one of the following statements concerning the cost of processing customer invoices is **incorrect**?

A. The total cost of processing customer invoices will increase as the volume of customer invoices increases.

B. The cost per unit for processing customer invoices will decline as the volume of customer invoices increases.

C. The cost of processing the 100th customer invoice will be the same as the cost of processing the first customer invoice.

D. The average cost per unit for processing a customer invoice will equal the incremental cost of processing one more customer invoice.

Answer (B) is correct.

Variable cost per unit remains constant in the short run regardless of the level of production.

A . Since the cost in question is strictly variable within the relevant range, the total cost will increase as the volume increases.

C . Since the cost in question is strictly variable within the relevant range, the unit cost remains the same.

D . Since the cost in question is strictly variable within the relevant range, the average cost per unit is the same as the incremental cost.

Question: 10 A company has found that its total electricity cost has both a fixed component and a variable component within the relevant range. The variable component seems to vary directly with the number of units produced. Which one of the following statements concerning electricity cost is incorrect?

A. The total electricity cost will increase as production volume increases.

B. The total electricity cost per unit of production will increase as production volume increases.

C. The variable electricity cost per unit of production will remain constant as production volume increases.

D. The fixed electricity cost per unit of production will decline as production volume increases.

Answer (B) is correct.

Because of the fixed portion, the per-unit cost of a mixed, or semivariable, cost will decrease as production volume increases.

- A . The total electricity cost will increase as production volume increases.
- C . The variable portion of total cost will remain constant on a per-unit basis as production volume increases.
- D . The fixed portion of total cost will decrease on a per-unit basis as production volume increases.

Question: 11 Which of the following is true about activity-based costing?

- A. It should not be used with process or job costing.
- B. It can be used only with process costing.
- C. It can be used only with job costing.
- D. It can be used with either process or job costing.

Answer (D) is correct.

Activity-based costing may be used by manufacturing, service, or retailing entities and in job-order or process costing systems.

- A . Activity-based costing may be used with either process or job costing.
- B . Activity-based costing may be used with either process or job costing.
- C . Activity-based costing may be used with either process or job costing.

Question: 12 A company with three products classifies its costs as belonging to five functions: design, production, marketing, distribution, and customer services. For pricing purposes, all company costs are assigned to the three products. The direct costs of each of the five functions are traced directly to the three products. The indirect costs of each of the five business functions are collected into five separate cost pools and then assigned to the three products using appropriate allocation bases. The allocation base that will most likely be the best for allocating the indirect costs of the distribution function is

- A. Number of customer phone calls.
- B. Number of shipments.
- C. Number of sales persons.
- D. Dollar sales volume.

Answer (B) is correct.

The number of shipments is an appropriate cost driver. A cause-and-effect relationship may exist between the number of shipments and distribution costs.

A . The number of customer phone calls has little relation to distribution. It is probably more closely related to customer service.

C . The number of sales persons is not related to distribution. It is more closely related to marketing.

D . The dollar sales volume is not necessarily related to distribution. It is more likely related to marketing.

Question: 13 Cost allocation is the process of assigning indirect costs to a cost object. The indirect costs are grouped in cost pools and then allocated by a common allocation base to the cost object. The base that is employed to allocate a homogeneous cost pool should

A. Have a cause-and-effect relationship with the cost items in the cost pool.

B. Assign the costs in the pool uniformly to cost objects even if the cost objects use resources in a nonuniform way.

C. Be a nonfinancial measure (e.g., number of setups) because a nonfinancial measure is more objective.

D. Have a high correlation with the cost items in the cost pool as the sole criterion for selection.

Answer (A) is correct.

A cost allocation base is the common denominator for systematically correlating indirect costs and a cost object. The cost driver of the indirect costs is ordinarily the allocation base. In a homogeneous cost pool, all costs should have the same or a similar cause-and-effect relationship with the cost allocation base.

B . If an allocation base uniformly assigns costs to cost objects when the cost objects use resources in a nonuniform way, the base is smoothing or spreading the costs. Smoothing can result in undercosting or overcosting of products, with adverse effects on product pricing, cost management and control, and decision making.

C . Financial measures (e.g., sales dollars and direct labor costs) and nonfinancial measures (e.g., setups and units shipped) can be used as allocation bases.

D . High correlation between the cost items in a pool and the allocation base does not necessarily mean that a cause-and-effect relationship exists. Two variables may move together without such a relationship. The perceived relationship between the cost driver (allocation base) and the indirect costs should have economic plausibility and high correlation.

Question: 14 Which of the following statements about activity-based costing (ABC) is false?

- A. Activity-based costing is useful for allocating marketing and distribution costs.
- B. Activity-based costing is more likely to result in major differences from traditional costing systems if the firm manufactures only one product rather than multiple products.
- C. In activity-based costing, cost drivers are what cause costs to be incurred.
- D. Activity-based costing differs from traditional costing systems in that products are not cross-subsidized.

Answer (B) is correct.

ABC determines the activities that will serve as cost objects and then accumulates a cost pool for each activity using the appropriate activity base (cost driver). It is a system that may be employed with job order or process costing methods. Thus, when there is only one product, the allocation of costs to the product is trivial. All of the cost is assigned to the one product; the particular method used to allocate the costs does not matter.

- A . Marketing and distribution costs should be allocated to specific products.
- C . ABC determines the activities that will serve as cost objects and then accumulates a cost pool for each activity using the appropriate activity base (cost driver).
- D . Under ABC, a product is allocated only those costs that pertain to its production; that is, products are not cross-subsidized.

Question: 15 Which of the following would be a reasonable basis for allocating the material handling costs to the units produced in an activity-based costing system?

- A. Number of production runs per year.
- B. Number of components per completed unit.
- C. Amount of time required to produce one unit.
- D. Amount of overhead applied to each completed unit.

Answer (B) is correct.

An essential element of activity-based costing (ABC) is driver analysis, which identifies the cause-and-effect relationship between an activity and its consumption of resources and for an activity and the demands made on it by a cost object. The number of components in a finished product and the amount of materials handling cost incurred have a direct causal relationship.

- A . The number of production runs per year is related to batch costs and not to individual unit costs.
- C . The amount of time required to produce one unit is the traditional basis for allocating overhead costs to the units produced when the production process is labor-intensive.

D . The amount of overhead applied to each completed unit is not an allocation basis but the result of the allocation process when determining product costs.

Question: 16 Volume-based costing systems

- A. Are appropriate when most manufacturing costs are homogeneously consumed.
- B. Address the increasing complexity and variety of overhead costs.
- C. Assign indirect costs to activities and then rationally allocate them to end products.
- D. Are less likely than activity-based costing systems to result in peanut-butter costing.

Answer (A) is correct.

Under a volume-based (traditional) costing system, overhead is accumulated in one cost pool and allocated to all end products using one allocation base. Examples are direct labor hours or direct machine hours used. Volume-based systems are appropriate when most manufacturing costs are homogeneously consumed.

B . Activity-based costing addresses the increasing complexity and variety of overhead costs.

C . Under activity-based costing, indirect costs are assigned to activities and then rationally allocated to end products.

D . Peanut-butter costing is inaccurate averaging of indirect costs over units of products or services that use different amounts of resources. It is less likely under activity-based costing than volume-based costing.

Question: 17 Which of the following is not a step in activity-based costing (ABC)?

- A. Activity analysis.
- B. Assignment of resource cost drivers to resource costs.
- C. Allocation of activity costs to resource cost pools.
- D. Assignment of activity cost drivers to activity costs.

Answer (C) is correct.

ABC consists of (1) activity analysis, (2) assignment of resource cost drivers to resource costs, (3) allocation of resource costs to activity cost pools, (4) assignment of activity cost drivers to activity costs, and (5) allocation of amounts in activity cost pools to final cost objects. Accordingly, resource costs (not activity costs) are allocated using resource cost drivers to activity cost pools (not resource cost pools).

A . Activity analysis is the first step in ABC.

B . Assignment of resource cost drivers to resource costs is the second step in ABC.

D . Assignment of activity cost drivers to activity costs is the fourth step in ABC.

Question: 18 What is the normal effect on the numbers of cost pools and cost assignment bases when an activity-based cost (ABC) system replaces a traditional cost system?

<u>Cost Pools</u>	<u>Cost Assignment Bases</u>
A. No effect	No effect
B. Increase	No effect
C. No effect	Increase
D. Increase	Increase

Answer (D) is correct.

In an ABC system, cost assignment is more precise than in traditional systems because activities rather than functions or departments are defined as cost objects. This structure permits assignment to more cost pools and the identification of a driver specifically related to each. A driver is a factor that causes a change in a cost. Thus, an ABC system uses more cost pools and cost assignment bases than a traditional system.

A . The numbers of cost pools and cost assignment bases increase.

B . The numbers of cost pools and cost assignment bases increase.

C . The numbers of cost pools and cost assignment bases increase.

Question: 19 A manufacturing firm produces multiple families of products requiring various combinations of different types of parts. The manufacturer has identified various cost pools, one of which consists of materials handling costs. This cost pool includes the wages and employee benefits of the workers involved in receiving materials, inspecting materials, storing materials in inventory, and moving materials to the workstations; depreciation and maintenance of materials handling equipment (e.g., forklift trucks); and costs of supplies used as well as other related costs. Of the following, the most appropriate cost driver for assigning materials handling costs to the various products most likely is

A. Direct labor hours.

B. Number of units produced.

- C. Number of vendors involved.
- D. Number of parts used.

Answer (D) is correct.

Cost drivers should be related to the costs accumulated in cost pools. The number of parts used has a direct cause-and-effect relationship with materials handling costs. The more parts used, the more handling is involved.

A . Direct labor hours is a traditional base for assigning overhead costs to production. However, it is not necessarily an appropriate basis for assigning overhead costs because direct labor is a small percentage of the total cost of most products.

B . Number of units produced is an output related measure. Materials handling costs should be related to an input measure.

C . The number of vendors might be appropriate for receiving and inspection, but materials handling in this situation encompasses more than costs related to the number of vendors.

Question: 20 Which of the following is a key disadvantage of a volume-based costing system?

- A. The averaging or spreading of indirect costs over products or service units that use different amounts of resources is inaccurate.
- B. They are inappropriate for organizations that have mostly direct manufacturing costs and little overhead.
- C. They are often more complex than activity-based costing systems.
- D. Resource and activity cost drivers are often difficult to determine.

Answer (A) is correct.

Under a volume-based costing system, overhead is put in a single cost pool and spread evenly across all end products. The result is peanut-butter costing, the inaccurate averaging or spreading of indirect costs over products or service units that use different amounts of resources.

B . Volume-based systems are appropriate when most manufacturing costs are direct.

C . Activity-based costing systems are generally more complex and time consuming than volume-based systems.

D . Resource and activity cost drivers are used in activity-based, not volume-based, costing systems.

Question: 21 A computer company charges indirect manufacturing costs to a project at a fixed percentage of a cost pool. This project is covered by a cost-plus government contract. Which of the following is an appropriate guideline for determining how costs are assigned to the pool?

- A. Establish separate pools for variable and fixed costs.
- B. Assign prime costs and variable administrative costs to the same pool.
- C. Establish a separate pool for each assembly line worker to account for wages.
- D. Assign all manufacturing costs related to the project to the same pool.

Answer (A) is correct.

Cost pools are accounts in which a variety of similar costs are accumulated prior to allocation to cost objectives. The overhead account is a cost pool into which various types of overhead are accumulated prior to their allocation. Indirect manufacturing costs are an element of overhead allocated to a cost pool. Ordinarily, different allocation methods are applied to variable and fixed costs, thus requiring them to be separated. Establishing separate pools allows the determination of dual overhead rates. As a result, the assessment of capacity costs, the charging of appropriate rates to user departments, and the isolation of variances are facilitated.

- B . Prime costs are direct costs, and variable administrative costs are period, not manufacturing, costs. The question inquires about indirect manufacturing costs.
- C . Establishing a separate pool for each assembly line worker to account for wages is not necessary under most cost allocation schemes.
- D . Different allocation methods are usually applied to variable costs and fixed costs.

Question: 22 A new advertising agency serves a wide range of clients including manufacturers, restaurants, service businesses, department stores, and other retail establishments. The accounting system the advertising agency has most likely adopted for its recordkeeping in accumulating costs is

- A. Job-order costing.
- B. Operation costing.
- C. Relevant costing.
- D. Process costing.

Answer (A) is correct.

Job-order costing is used by organizations whose products or services are readily identified by individual units or batches. The advertising agency accumulates its costs by client. Job-order costing is the most appropriate system for this type of nonmanufacturing firm.

- B . Operation costing would most likely be employed by a manufacturer producing goods that have common characteristics plus some individual characteristics. This would not be an appropriate system for an advertising agency with such a diverse client base.

- C . Relevant costing refers to expected future costs that are considered in decision making.
- D . Process costing is employed when a company mass produces a homogeneous product in a continuous fashion through a series of production steps.

Question: 23 If a company has 150 units that are 80% complete at the end of the year, how many equivalent units are in ending work-in-process?

- A. 0
- B. 120
- C. 150
- D. 187.5

Answer (B) is correct.

Equivalent units of production (EUP) equal the number of finished goods that could have been produced using the inputs consumed during the period. One equivalent unit corresponds to one complete physical unit of production. Given 150 work-in-process units that are 80% complete, total EUP equal 120 (150 × 80%).

- A . Incomplete units existed at the end of the year.
- C . The amount of 150 is the number of unfinished units.
- D . The amount of 187.5 results from dividing 150 by 80%.

Question: 24 A company employs a process cost system using the first-in, first-out (FIFO) method. The product passes through both Department 1 and Department 2 in order to be completed. Units enter Department 2 upon completion in Department 1. Additional direct materials are added in Department 2 when the units have reached the 25% stage of completion with respect to conversion costs. Conversion costs are added proportionally in Department 2. The production activity in Department 2 for the current month was as follows:

Beginning work-in-process inventory (40% complete with respect to conversion costs)	15,000
Units transferred in from Department 1	<u>80,000</u>
Units to account for	<u>95,000</u>
Units completed and transferred to finished goods	85,000
Ending work-in-process inventory (20% complete with respect to conversion costs)	<u>10,000</u>
Units accounted for	<u>95,000</u>

How many equivalent units for direct materials were added in Department 2 for the current month?

- A. 70,000 units.

- B. 80,000 units.
- C. 85,000 units.
- D. 95,000 units.

Answer (A) is correct.

Beginning inventory is 40% complete. Thus, direct materials have already been added. Ending inventory has not reached the 25% stage of completion, so direct materials have not yet been added to these units. Thus, the equivalent units for direct materials calculated on a FIFO basis are equal to the units started and completed in the current period (85,000 units completed – 15,000 units in BWIP = 70,000 units started and completed).

- B . The number of units transferred in from Department 1 was 80,000.
- C . Improperly using the weighted-average method to calculate equivalent units results in 85,000.
- D . The total of the units to be accounted for is 95,000.

Question: 25 Which of the following is a common method of calculating equivalent units of production (EUP)?

- A. FIFO.
- B. LIFO.
- C. Retail.
- D. Specific identification.

Answer (A) is correct.

Two methods of calculating EUP and cost per EUP are common: weighted-average and FIFO.

- B . LIFO is not a method commonly used to calculate EUP.
- C . The retail method is not a method commonly used to calculate EUP.
- D . The specific identification method is not a method commonly used to calculate EUP.

Question: 26 Which of the following is a false statement about equivalent units of production (EUP)?

- A. Determining the costs of unfinished units requires two calculations.
- B. Transferred-in costs are 100% complete.
- C. Two methods of calculating EUP and cost per EUP are commonly used.

D. Conversion costs generally are assumed to be incurred primarily at the beginning of the production cycle.

Answer (D) is correct.

The calculations of EUP and cost per EUP are made separately for direct materials and conversion costs. Conversion costs are assumed to be uniformly incurred.

A . Determining the costs of unfinished units requires the calculation of EUP and cost per EUP.

B . Costs transferred in from another department are 100% complete by definition.

C . Two methods of calculating EUP and cost per EUP are common: weighted-average and FIFO.

Question: 27 The units transferred in from the first department to the second department should be included in the computation of the equivalent units for the second department under which of the following methods of process costing?

	<u>FIFO</u>	<u>Weighted-Average</u>
A.	Yes	Yes
B.	Yes	No
C.	No	Yes
D.	No	No

Answer (A) is correct.

The units transferred from the first to the second department should be included in the computation of equivalent units for the second department regardless of the cost flow assumption used. The transferred-in units are considered raw materials added at the beginning of the period.

B . Units transferred in also should be included in the EUP computation under the weighted-average method.

C . Units transferred in also should be included in the EUP computation under the FIFO method.

D . Units transferred in should be included in the EUP computation under both methods.

Fact Pattern:

Ramseur Company employs a process costing system for its two-department manufacturing operation using the first-in, first-out (FIFO) inventory method. When units are completed in Department 1, they are transferred to Department 2 for completion. Inspection takes place in Department 2 immediately before the direct materials are added, when the process is 70% complete with respect to conversion. The specific identification method is used to account for lost units.

The number of defective units (that is, those failing inspection) is usually below the normal tolerance limit of 4% of units inspected. Defective units have minimal value, and the company sells them without any further processing for whatever it can. Generally, the amount collected equals, or slightly exceeds, the transportation cost. A summary of the manufacturing activity for Department 2, in units for the current month, is presented below.

	<u>Physical Flow</u> <u>(output units)</u>
Beginning inventory (60% complete with respect to conversion)	20,000
Units transferred in from Department 1	180,000
Total units to account for	<u>200,000</u>
Units completed in Department 2 during the month	170,000
Units found to be defective at inspection	5,000
Ending inventory (80% complete with respect to conversion)	25,000
Total units accounted for	<u>200,000</u>

Question: 28 Which of the following are not included in the monthly calculation of equivalent units of production (EUP) for direct materials?

- A. Units completed in Department 2 during the month.
- B. Units classified as scrap after inspection.
- C. Units in ending inventory (80% complete with respect to conversion).
- D. Units completed in Department 2 during the month.

Answer (B) is correct.

Equivalent units of production express the number of units that could have been fully completed given the same number of inputs. However, defective scrap is never considered to be inventory.

- A . Units completed are included in equivalent units.
- C . Incomplete inventory is included in the calculation of equivalent units.
- D . Units completed are included in equivalent units.

Fact Pattern:

Ramseur Company employs a process costing system for its two-department manufacturing operation using the first-in, first-out (FIFO) inventory method. When units are completed in Department 1, they are transferred to Department 2 for completion. Inspection takes place in Department 2 immediately before the direct materials are added, when the process is 70% complete with respect to conversion. The specific identification method is used to account for lost units.

The number of defective units (that is, those failing inspection) is usually below the normal tolerance limit of 4% of units inspected. Defective units have minimal value, and the company sells them without any further processing for whatever it can. Generally, the amount collected equals, or slightly exceeds, the transportation cost. A summary of the manufacturing activity for Department 2, in units for the current month, is presented below.

	Physical Flow (output units)
Beginning inventory (60% complete with respect to conversion)	20,000
Units transferred in from Department 1	180,000
Total units to account for	<u>200,000</u>
Units completed in Department 2 during the month	170,000
Units found to be defective at inspection	5,000
Ending inventory (80% complete with respect to conversion)	25,000
Total units accounted for	<u>200,000</u>

Question: 29 The units that failed inspection during the current month would be classified by Ramseur as

- A. Abnormal spoilage.
- B. Normal scrap.
- C. Normal reworked units.
- D. Normal waste.

Answer (B) is correct.

The units that failed inspection are classified as normal scrap because they have minimal value and can be sold without further reworking. The defective units are less than the 4% tolerance limit for normal spoilage. Scrap can be sold, disposed of, or reused.

A . Abnormal spoilage is not a normal result of efficient operations. In this case, the percentage of spoiled units is within the normal tolerance limit.

C . Reworked units are defective units that require further processing for them to be sold. This company does not rework defective units.

D . Waste has no monetary value and may have a disposal cost associated with it.

Question: 30 In a process-costing system, the cost of abnormal spoilage should be

A. Prorated between units transferred out and ending inventory.

B. Included in the cost of units transferred out.

C. Treated as a loss in the period incurred.

D. Ignored.

Answer (C) is correct.

Abnormal spoilage is spoilage that is not expected to occur under normal, efficient operating conditions. Because of its unusual nature, abnormal spoilage is typically treated as a loss in the period in which it is incurred.

A . Abnormal spoilage costs are not considered a component of the cost of good units produced.

B . Abnormal spoilage costs are not considered a component of the cost of good units produced.

D . Abnormal spoilage costs must be taken out of the manufacturing account.

Question: 31 Which of the following products are most likely to be accounted for using process costing?

A. Luxury cars.

B. Custom pipe fittings.

C. Hair styling services.

D. Thread.

Answer (D) is correct.

Process costing applies to relatively homogeneous products that are mass produced on a continuous basis. Examples are petroleum products, thread, and computer monitors.

A . These items are neither relatively homogeneous nor mass produced.

B . These items are neither relatively homogeneous nor mass produced.

C . These items are neither relatively homogeneous nor mass produced.

Question: 32 A company services office equipment. Some customers bring their equipment to the company's service shop; other customers prefer to have the company's service personnel come to their offices to repair their equipment. The most appropriate costing method for the company is

- A. A job-order costing system.
- B. An activity-based costing system.
- C. A process costing system.
- D. An operation costing system.

Answer (A) is correct.

Job-order costing systems accumulate costs for tasks or projects that are unique and nonrepetitive. Service organizations are interested in identifying the costs applicable to each customer and/or each service call.

B . Activity-based costing systems focus on generating more accurate cost information by identifying the activities that are cost drivers.

C . Process costing systems are designed for homogeneous products that are mass produced in continuous production runs.

D . Operation costing systems are designed for batches of homogeneous products; operation costing is a hybrid of job-order and process costing.

Question: 33 Companies characterized by the production of basically homogeneous products will most likely use which of the following methods for the purpose of averaging costs and providing management with unit-cost data?

- A. Job-order costing.
- B. Direct costing.
- C. Absorption costing.
- D. Process costing.

Answer (D) is correct.

Like products that are mass produced should be accounted for using process costing methods to assign costs to products. Costs are accumulated by departments or cost centers rather than by jobs, work-in-process is stated in terms of equivalent units, and unit costs are established on a departmental basis. Process costing is an averaging process that calculates the average cost of all units.

A . Job-order costing is employed when manufacturing involves different (heterogeneous) products.

B . Direct costing includes only variable manufacturing costs in unit cost. It may be used whether products are homogeneous or heterogeneous and with either process or job-order costing.

C . Absorption costing includes all manufacturing costs as part of the cost of a finished product. It may be used whether products are homogeneous or heterogeneous and with either process or job-order costing.

Question: 34 A corporation manufactures two brands of barbed wire fencing for sale to wholesalers and large ranchers. Which of the following would be the best type of costing system for such a company to use?

- A. EOQ system.
- B. Job-order system.
- C. Process system.
- D. Retail inventory system.

Answer (C) is correct.

A process costing system is used when a company mass produces a standardized product on a continuous basis. The production department becomes the cost center.

A . An EOQ system is an inventory control tool, not a cost system.

B . A job-order system is used when products are differentiated from one customer to the next. Each job (customer) is a separate cost center.

D . This company is a manufacturer, not a retailer. The retail method involves converting ending inventory stated at retail to cost.

Question: 35 The loan department of a financial corporation makes loans to businesses. The costs of processing these loans are often several thousand dollars. The costs for each loan, which include labor, telephone, and travel, are significantly different across loans. Some loans require the use of outside services such as appraisals, legal services, and consulting services, whereas other loans do not require these services. The most appropriate cost accumulation method for the loan department of the corporation is

- A. Job-order costing.
- B. Process costing.
- C. Differential costing.
- D. Joint product costing.

Answer (A) is correct.

Job-order costing is used by companies whose products or services are readily identified by individual units or a specific job, each of which receives varying amounts and types of input. The dissimilarity of the various loan services provided makes job-order costing appropriate.

B . Process costing is used by companies whose products or services are relatively uniform and are produced in a series of production steps or processes.

C . Differential costing is not a cost accumulation method. It is useful for decision-making.

D . Joint product costing is not a cost accumulation method. It is a method of allocating joint costs to joint products.

Question: 36 A corporation provides management consulting services to hospitals. Consulting engagements vary widely from hospital to hospital, both in terms of the nature of the consulting services provided and the scope of the consulting engagements. The most appropriate product costing system for the corporation is a

A. Process costing system.

B. Job-order costing system.

C. Operation costing system.

D. Just-in-time costing system.

Answer (B) is correct.

The job-order cost system of accounting is appropriate when producing products with individual characteristics and/or when identifiable groupings are possible, e.g., batches of certain styles or types of furniture. The unique aspect of job-order costing is the identification of costs to specific units or a particular job. A job-order system is appropriate in consulting because of the substantial variation between engagements.

A . A process costing system is used for continuous process manufacturing of units that are relatively homogeneous (e.g., oil refining and automobile production).

C . An operation costing system is a hybrid of job-order and process costing. It is used by companies that manufacture goods with some common and some dissimilar characteristics.

D . A just-in-time costing system is a hybrid-costing system used in conjunction with just-in-time production systems. It eliminates the stores account and detailed recording of raw materials and direct labor through various operations. It also replaces work-in-process with a raw and in-process inventory.

Question: 37 An equivalent unit of direct materials or conversion cost is equal to

- A. The amount of direct materials or conversion cost necessary to complete one unit of production.
- B. A unit of work-in-process inventory.
- C. The amount of direct materials or conversion cost necessary to start a unit of production in work-in-process.
- D. Fifty percent of the direct materials or conversion cost of a unit of finished goods inventory (assuming a linear production pattern).

Answer (A) is correct.

Equivalent units of production (EUP) measure the amount of work performed in each production phase in terms of fully processed units during a given period. Incomplete units are restated as the equivalent amount of completed units. The calculation is made separately for direct materials and conversion cost (direct labor and overhead).

- B . A unit of WIP inventory is not completed; an EUP is equal to one completed unit.
- C . An EUP is the amount of direct materials and conversion cost to complete, not start, a unit.
- D . An EUP is the amount of direct materials and conversion cost to complete 100%, not 50%, of a unit.

Question: 38 Weighted-average and first-in, first-out (FIFO) equivalent units would be the same in a period when which of the following occurs?

- A. No beginning inventory exists.
- B. No ending inventory exists.
- C. Beginning inventory units equal ending inventory units.
- D. Both a beginning and an ending inventory exist but are not necessarily equal.

Answer (A) is correct.

Equivalent units of production (EUP) is the number of complete goods that could have been produced using the inputs consumed during the period. Two methods of calculating EUP are in common use: weighted-average and FIFO. Under the weighted-average method, units in beginning inventory are treated as if they were started and completed during the current period. Beginning inventory is therefore not included in the EUP calculation. Under the FIFO method, units in beginning inventory are part of the EUP calculation. If no beginning inventory exists, then weighted-average and FIFO EUP would be the same.

B . That no ending inventory exists does not necessarily mean that EUP are the same under the two methods.

C . Beginning inventory units equaling ending inventory units does not signify that the EUP would be the same under the two methods.

D . The two methods of calculating EUP would not necessarily be the same if both a beginning and an ending inventory exist but are not equal.

Question: 39 In the computation of manufacturing cost per equivalent unit, the weighted-average method of process costing considers

A. Current costs only.

B. Current costs plus cost of beginning work-in-process inventory.

C. Current costs plus cost of ending work-in-process inventory.

D. Current costs minus cost of beginning work-in-process inventory.

Answer (B) is correct.

The weighted-average method of process costing combines the costs of work done in the previous period and the current period. Thus, the cost of the equivalent units is equal to the current cost (current period) plus the cost of BWIP (previous period).

A . The FIFO method considers only current costs.

C . The costs are being counted twice. The costs in EWIP are already included in current costs.

D . BWIP costs are added to, not subtracted from, the current costs in the weighted-average method.

Question: 40 Which of the following delays the assignment of costs to goods until the goods are finished?

A. Process costing.

B. Backflush costing.

C. Job-order costing.

D. Activity-based costing.

Answer (B) is correct.

Backflush costing delays the assignment of costs until the goods are finished. This type of costing is best suited to companies that maintain low inventories, e.g., in a just-in-time production system. Costs then can flow directly to cost of goods sold.

- A . Process costing assigns costs to goods during the production process.
- C . Job-order costing tracks specific costs of individual products.
- D . Activity-based costing tracks costs during the production process using multiple indirect cost pools corresponding to the activities that support output.

Question: 41 Spoilage from a manufacturing process was discovered during an inspection of work in process. In a process costing system, the cost of the spoilage would be added to the cost of the good units produced if the spoilage is

	<u>Abnormal</u>	<u>Normal</u>
A.	No	Yes
B.	No	No
C.	Yes	Yes
D.	Yes	No

Answer (A) is correct.

Normal spoilage is the spoilage that occurs under normal operating conditions. It is essentially uncontrollable in the short run. Normal spoilage arises under efficient operations and is treated as a product cost. Abnormal spoilage is spoilage that is not expected to occur under normal, efficient operating conditions. Because of its unusual nature, abnormal spoilage is typically treated as a loss in the period in which it is incurred.

- B . Normal spoilage is a product cost.
- C . Abnormal spoilage is a period cost.
- D . Normal, not abnormal, spoilage is a product cost.

Question: 42 The sale of scrap from a manufacturing process usually is recorded as a(n)

- A. Decrease in manufacturing overhead control.
- B. Increase in manufacturing overhead control.
- C. Decrease in finished goods control.

D. Increase in finished goods control.

Answer (A) is correct.

The sale of scrap arising from a manufacturing process is usually recorded by crediting manufacturing overhead control. The effect is to allocate the net cost of the scrap (historical cost – disposal proceeds) to the good units produced.

B . Manufacturing overhead control is credited for the amounts realized upon sale.

C . Crediting finished goods would not allocate the disposal value to all good units.

D . Amounts received from the sale of scrap reduce the costs inventoried.

Question: 43 Abnormal spoilage is

A. Not expected to occur when standard costs are used.

B. Not usually controllable by the production supervisor.

C. The result of unrealistic production standards.

D. Not expected to occur under efficient operating conditions.

Answer (D) is correct.

Abnormal spoilage is not expected to occur under normal, efficient operating conditions. It is typically treated as a period cost (a loss).

A . The occurrence of spoilage is not dependent on the costing system in use.

B . Abnormal spoilage is generally the responsibility of the production supervisor.

C . Abnormal spoilage may or may not be related to unrealistic production standards.

Question: 44 A company's cost accounting system uses a separate account for each department through which production of output passes. Unit costs are established on a departmental basis, and the average cost of all units is calculated. Which costing system is this company employing?

A. Job-order costing.

B. Activity-based costing.

C. Absorption costing.

D. Process costing.

Answer (D) is correct.

Process costing is an averaging process that calculates the average cost of all units. Costs are accumulated by departments or cost centers rather than by jobs, work-in-process is stated in terms of equivalent units, and unit costs are established on a departmental basis. Process costing is generally used for relatively homogeneous products that are mass produced on a continuous basis.

- A . Job-order costing systems accumulate costs by specific jobs, not by departments. Each job is considered a separate cost center.
- B . Activity-based costing systems focus on generating more accurate cost information by identifying the activities that are cost drivers. They allocate costs based on activities. This company has not identified or allocated costs by cost drivers.
- C . Absorption costing includes all manufacturing costs as part of the cost of a finished product. No information is given about which costs are allocated to the units. Thus, we cannot determine whether the company employs absorption costing.

Question: 45 The process costing method

- A. Applies to relatively homogeneous products that are mass produced.
- B. Uses subsidiary ledgers to track specific jobs.
- C. Attaches indirect costs to activities.
- D. Applies in industries that manufacture customized products.

Answer (A) is correct.

The process costing method applies to relatively homogeneous products that are mass produced on a continuous basis. It typically uses a work-in-process account for each department through which the production of output passes.

- B . Job-order costing uses subsidiary ledgers to track specific jobs.
- C . Activity-based costing attaches indirect costs to activities that are then rationally allocated to end products.
- D . Job-order costing applies in industries that manufacture customized products.

Question: 46 During its first year of operations, a company produced 275,000 units and sold 250,000 units. The following costs were incurred during the year:

Variable costs per unit:	
Direct materials	US \$15.00
Direct labor	10.00
Manufacturing overhead	12.50
Selling and administrative	2.50
Total fixed costs:	
Manufacturing overhead	US \$2,200,000
Selling and administrative	US \$1,375,000

The difference between operating profit calculated on the absorption-costing basis and on the variable-costing basis is that absorption-costing operating profit is

- A. US \$200,000 greater.
- B. US \$220,000 greater.
- C. US \$325,000 greater.
- D. US \$62,500 less.

Answer (A) is correct.

Absorption-costing operating profit exceeds variable-costing operating income because production exceeds sales, resulting in a deferral of fixed manufacturing overhead in the inventory calculated using the absorption method. The difference of US \$200,000 is equal to the fixed manufacturing overhead per unit ($\text{US } \$2,200,000 \div 275,000 = \text{US } \8.00) times the difference between production and sales ($275,000 - 250,000 = 25,000$, which is the inventory change in units).

- B . Units produced, not units sold, should be used as the denominator to calculate the fixed manufacturing cost per unit.
- C . Fixed selling and administrative costs are not properly inventoriable under absorption costing.
- D . Variable selling and administrative costs are period costs under both variable- and absorption-cost systems in the determination of operating profit.

Question: 47 Using the variable costing method, which of the following costs are assigned to inventory?

	<u>Variable Selling and Administrative Costs</u>	<u>Variable Factory Overhead Costs</u>
A.	Yes	Yes
B.	Yes	No
C.	No	No
D.	No	Yes

Answer (D) is correct.

Under variable costing, only variable manufacturing costs (not variable selling, general, and administrative costs) are assigned to inventory. Variable manufacturing overhead is a variable manufacturing cost. Thus, it is assigned to inventory.

A . Variable selling and administrative costs are not assigned to inventory.

B . Variable manufacturing overhead costs are assigned to inventory, and variable selling and administrative costs are not.

C . Only variable manufacturing overhead costs are assigned to inventory.

Question: 48 Using absorption costing, fixed manufacturing overhead costs are best described as

A. Direct period costs.

B. Indirect period costs.

C. Direct product costs.

D. Indirect product costs.

Answer (D) is correct.

Using absorption costing, fixed manufacturing overhead is included in inventoriable (product) costs. Fixed manufacturing overhead costs are indirect costs because they cannot be directly traced to specific units produced.

A . Fixed manufacturing overhead costs are neither direct nor period costs.

B . Fixed manufacturing overhead costs are not period costs.

C . Fixed manufacturing overhead costs are not direct costs.

Question: 49 Using absorption costing, which of the following costs are included in cost of goods sold?

- A. All manufacturing costs.
- B. Variable manufacturing costs.
- C. Fixed manufacturing costs.
- D. All manufacturing costs and variable nonmanufacturing costs.

Answer (A) is correct.

Absorption (full) costing includes all manufacturing costs, both fixed and variable. This method is required under GAAP for external reporting purposes.

- B . Fixed manufacturing costs also are included in cost of goods sold for absorption costing.
- C . Variable manufacturing costs also are included in cost of goods sold under absorption costing.
- D . Variable nonmanufacturing costs are not included in cost of goods sold under absorption costing.

Question: 50 Under variable costing, which of the following costs are included in cost of goods sold?

- A. All manufacturing costs.
- B. Variable manufacturing costs.
- C. All variable costs.
- D. All manufacturing costs and variable nonmanufacturing costs.

Answer (B) is correct.

Under variable costing, the product cost includes only variable manufacturing costs. All fixed costs are expensed in the period incurred.

- A . Fixed manufacturing cost are not included in cost of goods sold under variable costing.
- C . Variable nonmanufacturing cost are not included in cost of goods sold under variable costing.
- D . Neither fixed manufacturing costs nor variable nonmanufacturing costs are included in cost of goods sold under variable costing.

Question: 51 In a company, products pass through some or all of the production departments during manufacturing, depending upon the product being manufactured. Direct material and direct labor costs are traced directly to the products as they flow through each production department. Manufacturing

overhead is assigned in each department using separate departmental manufacturing overhead rates. The inventory costing method that the manufacturing company is using in this situation is

- A. Absorption costing.
- B. Activity-based costing.
- C. Backflush costing.
- D. Variable costing.

Answer (A) is correct.

Under absorption costing, inventories include all direct manufacturing costs and both variable and fixed manufacturing overhead (indirect) costs.

- B . Activity-based costing develops cost pools for activities and then allocates those costs to cost objects based on the drivers of the activities.
- C . A backflush costing system applies costs based on output.
- D . Variable costing excludes fixed manufacturing overhead costs from inventoriable costs and treats them as period costs.

Fact Pattern: A and B are autonomous divisions of a corporation. They have no beginning or ending inventories, and the number of units produced is equal to the number of units sold. Following is financial information relating to the two divisions:

	<u>Division A</u>	<u>Division B</u>
Sales	US \$150,000	US \$400,000
Other revenue	10,000	15,000
Direct materials	30,000	65,000
Direct labor	20,000	40,000
Variable manufacturing overhead	5,000	15,000
Fixed manufacturing overhead	25,000	55,000
Variable S&A expense	15,000	30,000
Fixed S&A expense	35,000	60,000
Central corporate expenses (allocated)	12,000	20,000

Question: 52 Which of the following is not included in the total contribution to corporate profits generated by Division A before allocation of central corporate expenses?

- A. Other revenue.
- B. Fixed S&A expense.
- C. Fixed manufacturing overhead and fixed S&A expenses.
- D. Central corporate expenses.

Answer (D) is correct.

Division A's total contribution to corporate profits is based on all of its revenues and expenses. The central corporate expense allocation is not controllable and also might not be influenced by a responsibility center's manager. Thus, it is not useful for performance evaluation of that manager.

- A . This amount is included in the contribution to corporate profits.
- B . This amount is included in the contribution to corporate profits.
- C . These amounts are included in the contribution to corporate profits.

Fact Pattern: A and B are autonomous divisions of a corporation. They have no beginning or ending inventories, and the number of units produced is equal to the number of units sold. Following is financial information relating to the two divisions:

	<u>Division A</u>	<u>Division B</u>
Sales	US \$150,000	US \$400,000
Other revenue	10,000	15,000
Direct materials	30,000	65,000
Direct labor	20,000	40,000
Variable manufacturing overhead	5,000	15,000
Fixed manufacturing overhead	25,000	55,000
Variable S&A expense	15,000	30,000
Fixed S&A expense	35,000	60,000
Central corporate expenses (allocated)	12,000	20,000

Question: 53 Which of the following are included in the calculation of the contribution margin for Division B?

- I. Direct materials
 - II. Fixed manufacturing overhead
 - III. Variable selling and administrative expense
- A. I only.
 - B. I and II.
 - C. I and III.
 - D. I, II, and III.

Answer (C) is correct.

The contribution margin equals revenue minus variable costs. Division B's contribution margin is equal to sales, plus other revenue, minus direct materials, direct labor, variable overhead, and variable S&A expense.

- A . The contribution margin also includes variable S&A expense.
- B . The contribution margin does not include fixed manufacturing overhead. It includes variable S&A expense.
- D . The contribution margin does not include fixed manufacturing overhead.

Question: 54 A manufacturer uses variable costing for internal reporting and analysis purposes. However, it converts its records to absorption costing for external reporting. The two operating income amounts are always reconciled to assure that the conversion is accurate. Financial data for the year are presented below:

	<u>Budget</u>	<u>Actual</u>
Sales (in units)	495,000	510,000
Production (in units)	480,000	500,000
	<u>Variable Costing</u>	<u>Absorption Costing</u>
Variable costs	US \$10.00	US \$10.00
Fixed manufacturing overhead	0	6.00
Total unit manufacturing costs	<u>US \$10.00</u>	<u>US \$16.00</u>

What is the reason for the difference between the operating income calculated under the variable costing method and the absorption costing method?

- A. Fixed manufacturing overhead is a product cost under absorption costing and a period cost under variable costing.
- B. Fixed manufacturing overhead is a period cost under absorption costing and a product cost under variable costing.
- C. Variable manufacturing overhead is a product cost under absorption costing and a period cost under variable costing.
- D. Variable manufacturing overhead is a period cost under absorption costing and a product cost under variable costing.

Answer (A) is correct.

The difference between absorption and variable costing is in the treatment of fixed manufacturing overhead. Absorption costing includes all manufacturing costs, variable and fixed, in product cost. This method is required under GAAP. Variable costing includes only variable manufacturing costs in product cost. It is not permitted for external reporting, but it is useful for managerial purposes.

- B . Fixed manufacturing overhead is a period cost under variable costing and a product cost under absorption costing.
- C . Variable manufacturing overhead is a product cost under absorption and variable costing.

D . Variable manufacturing overhead is a product cost under absorption and variable costing.

Question: 55 When comparing absorption costing with variable costing, which of the following statements is false?

- A. Absorption costing enables managers to increase operating profits in the short run by increasing inventories.
- B. When sales volume is more than production volume, variable costing will result in higher operating profit.
- C. A manager who is evaluated based on variable costing operating profit would be tempted to increase production at the end of a period in order to get a more favorable review.
- D. Under absorption costing, operating profit is a function of both sales volume and production volume.

Answer (C) is correct.

Absorption (full) costing is the accounting method that considers all manufacturing costs as product costs. These costs include variable and fixed manufacturing costs whether direct or indirect. Variable (direct) costing considers only variable manufacturing costs to be product costs, i.e., inventoriable. Fixed manufacturing costs are considered period costs and are expensed as incurred. If production is increased without increasing sales, inventories will rise. However, all fixed costs associated with production will be an expense of the period under variable costing. Thus, this action will not artificially increase profits and improve the manager's review.

- A . Increasing inventories increases absorption costing profit as a result of capitalizing fixed manufacturing overhead.
- B . When sales volume exceeds production, inventories decline. Thus, fixed manufacturing overhead expensed will be greater under absorption costing.
- D . Under variable costing, operating profit is a function of sales. Under absorption costing, it is a function of sales and production.

Question: 56 In an income statement prepared using the variable-costing method, fixed manufacturing overhead would

- A. Not be used.
- B. Be used in the computation of operating income but not in the computation of the contribution margin.
- C. Be used in the computation of the contribution margin.
- D. Be treated the same as variable manufacturing overhead.

Answer (B) is correct.

Under the variable-costing method, the contribution margin equals sales minus variable expenses. Fixed selling and administrative costs and fixed manufacturing overhead are subtracted from the contribution margin to arrive at operating income. Thus, fixed costs are included only in the computation of operating income.

A . Fixed manufacturing overhead is deducted from the contribution margin to determine operating income.

C . Only variable expenses are used in the computation of the contribution margin.

D . Variable manufacturing overhead is included in the computation of contribution margin and fixed manufacturing overhead is not.

Question: 57 Which of the following statements is correct regarding the difference between the absorption costing and variable costing methods?

A. When production equals sales, absorption costing income is greater than variable costing income.

B. When production equals sales, absorption costing income is less than variable costing income.

C. When production is greater than sales, absorption costing income is greater than variable costing income.

D. When production is less than sales, absorption costing income is greater than variable costing income.

Answer (C) is correct.

When production exceeds sales, ending inventory increases. Under absorption costing, some fixed costs are included in ending inventory. Under variable costing, all fixed costs are expensed. Accordingly, income is higher under absorption costing.

A . When production and sales are equal, the two methods report the same income.

B . When production and sales are equal, the two methods report the same income.

D . When production is less than sales, ending inventory decreases. Under absorption costing, prior-period fixed costs included in beginning inventory are expensed. Under variable costing, only the current period's fixed costs are expensed. Thus, income is higher under variable costing.

Question: 58 What costs are treated as product costs under variable costing?

- A. Only direct costs.
- B. Only variable production costs.
- C. All variable costs.
- D. All variable and fixed manufacturing costs.

Answer (B) is correct.

Product costs under variable costing include direct materials, direct labor, and variable manufacturing overhead. Each is a variable production cost.

- A . Variable manufacturing overhead must also be included.
- C . Only variable production costs, not variable selling and administrative costs, are product costs in variable costing.
- D . Absorption costing, not variable costing, includes all variable and fixed production costs.

Question: 59 In an income statement prepared as an internal report using the variable costing method, variable selling and administrative expenses are

- A. Not used.
- B. Treated the same as fixed selling and administrative expenses.
- C. Used in the computation of operating income but not in the computation of the contribution margin.
- D. Used in the computation of the contribution margin.

Answer (D) is correct.

In a variable costing income statement, the contribution margin equals sales minus all variable costs, which include the variable selling and administrative expenses as well as variable manufacturing costs (direct materials, direct labor, and variable manufacturing overhead). Operating income equals the contribution margin minus all fixed costs.

- A . Variable selling and administrative expenses are included in the determination of the contribution margin.
- B . Fixed selling and administrative expenses are subtracted from the contribution margin to arrive at operation income.
- C . Variable selling and administrative expenses are used in the computation of the contribution margin.

Question: 60 Which of the following statement(s) is(are) true regarding the relationship between absorption costing net income and variable costing income?

1. When production exceeds sales, variable costing income exceeds absorption costing net income.
 2. When sales exceeds production, absorption costing income exceeds variable costing net income.
- A. 1 only.
- B. 2 only.
- C. Both 1 and 2.
- D. Neither 1 nor 2.

Answer (D) is correct.

When production exceeds sales, operating income (and therefore net income) is higher under absorption costing. This is because, under absorption costing, some fixed manufacturing costs for the period are still embedded in ending inventory and not expensed as under variable costing. When sales exceeds production, operating income (and therefore net income) is higher under variable costing. This is because, under absorption costing, costs embedded in inventory during prior periods move into cost of goods sold, lowering income.

A . When production exceeds sales, operating income (and therefore net income) is higher under absorption costing.

B . When sales exceeds production, operating income (and therefore net income) is higher under variable costing. The reason is that costs recorded in inventory during prior periods are recognized in cost of goods sold, lowering income.

C . Both statements describe the opposite of the true relationship between variable and absorption costing.

Question: 61 In an income statement prepared as an internal report, total fixed costs normally are shown separately under

	<u>Absorption Costing</u>	<u>Variable Costing</u>
A.	No	No
B.	No	Yes
C.	Yes	Yes
D.	Yes	No

Answer (B) is correct.

In a variable-costing income statement, all variable costs are deducted from sales revenue to arrive at the contribution margin. Total fixed costs are then subtracted from the contribution margin to determine operating income. In an absorption-costing income statement, fixed manufacturing overhead included in the cost of goods sold is subtracted from sales revenue in the calculation of the gross margin. Other fixed costs are among the amounts subtracted from the gross margin to determine operating income.

- A . Total fixed costs are shown separately under variable costing.
- C . Total fixed costs are not shown separately under absorption costing.
- D . Total fixed costs are normally shown separately under variable costing but not under absorption costing.

Question: 62 Which method of inventory costing treats direct manufacturing costs and manufacturing overhead costs, both variable and fixed, as inventoriable costs?

- A. Direct costing.
- B. Variable costing.
- C. Absorption costing.
- D. Conversion costing.

Answer (C) is correct.

Absorption (full) costing considers all manufacturing costs to be inventoriable as product costs. These costs include variable and fixed manufacturing costs, whether direct or indirect. The alternative to absorption is known as variable (direct) costing.

- A . Direct costing does not inventory fixed manufacturing overhead.
- B . Variable costing does not inventory fixed manufacturing overhead.
- D . Conversion costs include direct labor and manufacturing overhead but not direct materials.

Question: 63 When a firm prepares financial reports by using absorption costing,

- A. Profits will always increase with increases in sales.
- B. Profits will always decrease with decreases in sales.
- C. Profits may decrease with increased sales even if there is no change in selling prices and costs.
- D. Decreased output and constant sales result in increased profits.

Answer (C) is correct.

In an absorption costing system, fixed overhead costs are included in inventory. When sales exceed production, more overhead is expensed under absorption costing because fixed overhead is carried over from the prior inventory. If sales exceed production, more than one period's fixed overhead is recognized as expense. Accordingly, if the increase in fixed overhead expensed is greater than the contribution margin of the increased units sold, less profit may result from an increased level of sales.

- A . Profit is a function of both sales and production, so profit may not increase with increases in sales.
- B . Profit is a function of both sales and production, so profit may not decrease with decreases in sales.
- D . Decreased output will increase the unit cost of items sold. Fixed overhead per unit will increase.

Question: 64 When using a variable costing system, the contribution margin (CM) discloses the excess of

- A. Revenues over fixed costs.
- B. Projected revenues over the breakeven point.
- C. Revenues over variable costs.
- D. Variable costs over fixed costs.

Answer (C) is correct.

Contribution margin is the difference between revenues and variable costs. No distinction is made between variable product costs and variable selling costs; both are deducted from revenue to arrive at CM.

- A . CM is the excess of total revenue over total variable costs, not over fixed costs.

B . Projected revenues over the breakeven point is the projected net income.

D . CM is the excess of total revenue over total variable costs, not variable costs over fixed costs.

Question: 65 During the month just ended, Vane Co. produced and sold 10,000 units of a product. The product's unit cost under variable costing includes which of the following?

- I. Variable manufacturing overhead
- II. Fixed manufacturing overhead
- III. Variable selling costs

A. I only.

B. I and II only.

C. I and III only.

D. I, II, and III.

Answer (A) is correct.

Unit cost under variable (direct) costing includes variable manufacturing costs only (i.e., direct materials, direct labor, and variable manufacturing overhead). Fixed manufacturing overhead and selling expenses are period costs.

B . Fixed manufacturing overhead is a period cost under variable costing.

C . Selling expenses are period costs under variable costing.

D . Fixed manufacturing overhead and selling expenses are period costs under variable costing.

Question: 66 Fleet, Inc., manufactured 700 units of Product A, a new product, during the year. Product A's variable and fixed manufacturing costs per unit were US \$6.00 and US \$2.00, respectively. The inventory of Product A on December 31 consisted of 100 units. There was no inventory of Product A on January 1. What is the decrease in the dollar amount per unit of inventory on December 31 if variable costing is used instead of absorption costing?

A. US \$8.00

B. US \$2.00

C. US \$0

D. US \$6.00

Answer (B) is correct.

Given an inventory increase of 100 units during the year and the fixed manufacturing cost per unit of US \$2.00, US \$2.00 per unit of overhead is deferred using absorption costing but expensed immediately using variable costing. Thus, variable-costing inventory is US \$2.00 per unit lower than under absorption costing.

- A . The amount of US \$8.00 is the total unit cost, not the decrease in unit cost under variable costing.
- C . The cost per unit differs. Fixed manufacturing costs are a product cost under absorption costing and a period cost under variable costing.
- D . The amount of US \$6.00 is the unit variable cost.

Question: 67 During May, Roy Co. produced 10,000 units of Product X. Costs incurred by Roy during May are as follows:

Direct materials	US \$10,000
Direct labor	20,000
Variable manufacturing overhead	5,000
Variable selling and general expenses	3,000
Fixed manufacturing overhead	9,000
Fixed selling and general expenses	4,000
Total	<u>US \$51,000</u>

Under absorption costing, Product X's unit cost includes

- A. All direct manufacturing costs, all variable costs, and all fixed costs.
- B. All direct manufacturing costs, variable manufacturing overhead, and fixed manufacturing overhead.
- C. All direct manufacturing costs and variable manufacturing overhead.
- D. All direct manufacturing costs and all variable costs.

Answer (B) is correct.

The absorption-basis unit cost of Product X includes direct materials, direct labor, variable manufacturing overhead, and fixed manufacturing overhead.

- A . Unit cost under absorption costing does not include variable or fixed selling and general expenses.
- C . Unit cost under absorption costing also includes fixed manufacturing overhead.
- D . Unit cost under absorption costing includes fixed manufacturing overhead and does not include variable selling and general expenses.

Question: 68 Which of the following costs of a manufacturer is most likely to be treated differently under absorption costing and variable costing?

- A. Factory rent.
- B. Secretarial services costs.
- C. Cost of electricity.
- D. Advertising fees.

Answer (A) is correct.

The only difference between the absorption and variable costing methods is the way they treat fixed overhead. Absorption costing treats fixed overhead as a product cost, but variable costing treats it as a period cost. The only fixed overhead among the answer choices is factory rent.

- B . Secretarial services costs are administrative expenses and are treated as period costs under both methods.
- C . Cost of electricity is a variable overhead cost, a product cost under both methods.
- D . Advertising fees are selling expenses, which are period costs under both methods.

Question: 69 Which statement about the absorption and variable costing methods is true?

- A. GAAP allow the use of variable costing.
- B. Period costs under variable costing consists only of nonmanufacturing costs.
- C. When production exceeds sales, operating income is higher under variable costing.
- D. Absorption costing encourages manufacturers to overproduce.

Answer (D) is correct.

Fixed manufacturing overhead costs are treated as product costs under the absorption costing method. Thus, when production exceeds sales, some fixed costs are recorded in ending inventory, and operating income is higher than under the variable costing method.

- A . Variable costing is not allowed under U.S. GAAP or IFRS for external financial reporting. The absorption costing method is required.
- B . Period costs under variable costing consist of fixed manufacturing overhead and nonmanufacturing costs (selling and administrative expenses).
- C . When production exceeds sales, ending inventory increases. Under variable costing, all fixed costs have been expensed. Thus, operating income is lower under variable costing.

Fact Pattern: The segmented income statement for a retail company with three product lines is presented below:

	<u>Total Company</u>	<u>Product Line 1</u>	<u>Product Line 2</u>	<u>Product Line 3</u>
Volume (in units)		20,000	28,000	50,000
Sales revenue	US \$2,000,000	US \$800,000	US \$700,000	US \$500,000
Costs & expenses:				
Variable costs	1,020,000	376,000	434,000	210,000
Fixed costs	810,000	294,000	316,000	200,000
Total costs & expenses	<u>US \$1,830,000</u>	<u>US \$670,000</u>	<u>US \$750,000</u>	<u>US \$410,000</u>
Operating income (loss)	<u>US \$ 170,000</u>	<u>US \$130,000</u>	<u>US \$ (50,000)</u>	<u>US \$ 90,000</u>

Question: 70 The company has an opportunity to promote one of its product lines by making a one-time US \$7,000 expenditure. The company can choose only one of the three product lines to promote. The incremental sales revenue that would be realized from this US \$7,000 promotion expenditure in each of the product lines is estimated as follows:

	<u>Increase in Sales Revenue</u>
Product Line 1	US \$15,000
Product Line 2	20,000
Product Line 3	14,000

In order to maximize profits, the promotion expenditure should be spent on <List A>, resulting in an increase in operating income of <List B>.

	<u>List A</u>	<u>List B</u>
A. Product Line 2		US \$13,000
B. Product Line 2		US \$5,000
C. Product Line 3		US \$1,400
D. Product Line 3		US \$1,120

Answer (D) is **correct**.

Fixed costs, being irrelevant, are ignored. The first step is to determine the contribution margin ratio for each product line.

	Product Line 1	Product Line 2	Product Line 3
Sales revenue	US \$800,000	US \$700,000	US \$500,000
Total variable costs	US \$376,000	US \$434,000	US \$210,000
Contribution margin	US \$424,000	US \$266,000	US \$290,000
Divided by sales:	÷ 800,000	÷ 700,000	÷ 500,000
CM ratio	<u>53%</u>	<u>38%</u>	<u>58%</u>

The incremental promotion cost (US \$7,000) is subtracted from the incremental revenue to determine the marginal benefit of promoting each product line.

Incremental revenue	US \$ 15,000	US \$ 20,000	US \$ 14,000
Times: CM ratio	× .53	× .38	× .58
Incremental contribution margin	\$ 7,950	\$ 7,600	\$ 8,120
Minus: Promotion cost	(7,000)	(7,000)	(7,000)
Incremental profits	<u>US \$ 950</u>	<u>US \$ 600</u>	<u>US \$ 1,120</u>

The promotion expense should be spent on Product Line 3, resulting in an increase in operating income of US \$1,120.

- A . Product Line 2 has an increased profit of US \$600.
- B . Product Line 2 has an increased profit of US \$600.
- C . US \$1,400 omits the commissions from the calculation.

Fact Pattern: The segmented income statement for a retail company with three product lines is presented below:

	Total Company	Product Line 1	Product Line 2	Product Line 3
Volume (in units)		20,000	28,000	50,000
Sales revenue	US \$2,000,000	US \$800,000	US \$700,000	US \$500,000
Costs & expenses:				
Variable costs	1,020,000	376,000	434,000	210,000
Fixed costs	810,000	294,000	316,000	200,000
Total costs & expenses	<u>US \$1,830,000</u>	<u>US \$670,000</u>	<u>US \$750,000</u>	<u>US \$410,000</u>
Operating income (loss)	<u>US \$ 170,000</u>	<u>US \$130,000</u>	<u>US \$ (50,000)</u>	<u>US \$ 90,000</u>

Question: 71 One company executive has expressed concern about the operating loss that has occurred in Product Line 2 and has suggested that Product Line 2 be discontinued. If Product Line 2 were to be dropped, the operating income of the company would

- A. Increase by US \$50,000.
- B. Decrease by US \$384,000.
- C. Decrease by US \$266,000.

D. Decrease by US \$424,000.

Answer (C) is correct.

The operating income will decrease. Product Line 2 income will be lost, but only the variable costs will be avoided. Accordingly, the decrease will be US \$266,000 [$-\$700,000 + \$434,000$]. The other shared costs will have to be absorbed by the two remaining product lines.

A . An increase of US \$50,000 assumes the revenue will be lost and all of its costs will be avoided.

B . A decrease of US \$384,000 assumes the revenue will be lost and fixed costs will be avoided.

D . If Product Line 1 were to be dropped, the operating income of the company would decrease by US \$424,000.

Fact Pattern: The segmented income statement for a retail company with three product lines is presented below:

	<u>Total Company</u>	<u>Product Line 1</u>	<u>Product Line 2</u>	<u>Product Line 3</u>
Volume (in units)		20,000	28,000	50,000
Sales revenue	US \$2,000,000	US \$800,000	US \$700,000	US \$500,000
Costs & expenses:				
Variable costs	1,020,000	376,000	434,000	210,000
Fixed costs	810,000	294,000	316,000	200,000
Total costs & expenses	<u>US \$1,830,000</u>	<u>US \$670,000</u>	<u>US \$750,000</u>	<u>US \$410,000</u>
Operating income (loss)	<u>US \$ 170,000</u>	<u>US \$130,000</u>	<u>US \$ (50,000)</u>	<u>US \$ 90,000</u>

Question: 72 A customer, operating in an isolated foreign market, has approached the head salesperson for Product Line 1 and offered to purchase 4,000 units of a special-order product over the next 12 months. This product would be sold in the same manner as Product Line 1's other products except that the customer is hoping for a price break. Product Line 1 has excess capacity, meaning that the rate or amount of the remaining operating costs would not change as a consequence of the purchase and sale of this special-order product. The minimum selling price for this special-order product would be

A. US \$18.80

B. US \$33.50

C. US \$12.25

D. US \$14.70

Answer (A) is correct.

Product Line 1 needs to cover its variable out-of-pocket costs as a minimum on this special-order product; therefore, any selling price greater than the variable cost will contribute towards profits. Thus, the minimum selling price of the special-order product is US \$18.80 ($\$376,000 \div 20,000$ units).

- B . US \$33.50 is calculated based on a full cost approach.
- C . Dividing total fixed costs by 24,000 units results in US \$12.25.
- D . Dividing total fixed costs by 20,000 units results in US \$14.70.

Fact Pattern: A company manufactures and sells a single product. It takes 2 machine hours to produce one unit. Annual sales are expected to be 75,000 units. Annual production capacity is 200,000 machine hours. Expected selling price is US \$10 per unit. Cost data for manufacturing and selling the product are as follows:

Variable costs (per unit)	
Direct materials	US \$3.00
Direct labor	1.00
Variable manufacturing overhead	0.80
Variable selling	2.00
Fixed costs (per year)	
Fixed manufacturing overhead	US \$90,000
Fixed selling	60,000

Question: 73 The company receives a special order for 10,000 units at US \$7.60. Variable selling cost for each of these 10,000 units will be US \$1.20 instead of the normal US \$2.00. This special order will not affect regular sales of 75,000 units. If the company accepts this special order, its profit will

- A. Increase by US \$8,000.
- B. Increase by US \$16,000.
- C. Decrease by US \$4,000.
- D. Decrease by US \$12,000.

Answer (B) is correct.

If the company accepts the special order, its revenue will increase by US \$76,000 (10,000 units \times \$7.60). However, its incremental cost will include only the variable costs because fixed manufacturing and selling costs will be unchanged. The increase in cost from accepting the special order is US \$60,000 [10,000 units \times ($\$3.00 + \$1.00 + \$0.80 + \1.20)]. Thus, acceptance of the special order will increase profits by US \$16,000 ($\$76,000 - \$60,000$).

- A . An increase of US \$8,000 assumes unit variable selling cost is US \$2.00.
- C . Profit will increase.

D . Profit will increase.

Fact Pattern: A company manufactures and sells a single product. It takes 2 machine hours to produce one unit. Annual sales are expected to be 75,000 units. Annual production capacity is 200,000 machine hours. Expected selling price is US \$10 per unit. Cost data for manufacturing and selling the product are as follows:

Variable costs (per unit)	
Direct materials	US \$3.00
Direct labor	1.00
Variable manufacturing overhead	0.80
Variable selling	2.00
Fixed costs (per year)	
Fixed manufacturing overhead	US \$90,000
Fixed selling	60,000

Question: 74 The company estimates that by reducing its selling price to US \$9.30 per unit, it can increase sales to 90,000 units annually. Fixed costs per year and unit variable costs will remain unchanged. If the company reduces its selling price to US \$9.30 per unit, its profit will

- A. Decrease by US \$5,000.
- B. Decrease by US \$15,000.
- C. Decrease by US \$45,000.
- D. Increase by US \$15,000.

Answer (B) is correct.

Because total fixed costs are unaffected, the change in profit is the change in the contribution margin. The contribution margin at the current selling price is US \$240,000 [75,000 units × (\$10 – \$3 – \$1 – \$0.80 – \$2)]. The contribution margin at the US \$9.30 selling price is US \$225,000 [90,000 units × (\$9.30 – \$3 – \$1 – \$0.80 – \$2)]. Hence, profit will be reduced by US \$15,000 (\$240,000 – \$225,000) if the selling price is lowered to US \$9.30.

- A . Profit will decrease by US \$15,000.
- C . Profit will decrease by US \$15,000.
- D . Profit will decrease by US \$15,000.

Question: 75 A company manufactures a product that is sold for US \$37.95. It uses an absorption-cost system. Plant capacity is 750,000 units annually, but normal volume is 500,000 units. Costs at normal volume are given below.

	Unit Cost	Total Cost
Direct materials	US \$ 9.80	US \$ 4,900,000
Direct labor	4.50	2,250,000
Manufacturing overhead	12.00	6,000,000
Selling and administrative:		
Variable	2.50	1,250,000
Fixed	4.20	2,100,000
Total cost	US \$33.00	US \$16,500,000

Fixed manufacturing overhead is budgeted at US \$4.5 million. A customer has offered to purchase 100,000 units at US \$25 each to be packaged in large cartons, not the normal individual containers. It will pick up the units in its own trucks. Thus, variable selling and administrative expenses will decrease by 60%. When calculating total relevant costs, which of the following is not included in the calculation?

- A. Variable selling and administrative expenses.
- B. Fixed selling and administrative expenses.
- C. Direct materials.
- D. Variable manufacturing overhead.

Answer (B) is correct.

The necessary assumptions are that all fixed costs and the unit variable costs of direct materials, direct labor, and variable manufacturing overhead are not affected by the special order. Thus, all fixed costs are not relevant because they will not change if the order is accepted.

- A . Variable selling and administrative expenses are relevant. They will decrease if the order is accepted.
- C . Direct materials should be used in the calculation of relevant costs.
- D . Variable manufacturing overhead should be used in the calculation of relevant costs.

Fact Pattern: A business needs a computer application that can be either developed internally or purchased. Suitable software from a vendor costs US \$29,000. Minor modifications and testing can be conducted by the systems staff as part of their regular workload.

If the software is developed internally, a systems analyst would be assigned full time, and a contractor would assume the analyst's responsibilities. The hourly rate for the regular analyst is US \$25. The hourly rate for the contractor is US \$22. The contractor would occupy an empty office. The office has 100 square feet, and occupancy cost is US \$45 per square foot.

Computer time is charged using predetermined rates. The organization has sufficient excess computer capacity for either software development or modification/testing of the purchased software.

Other related data follows:

	<u>Internal Development</u>	<u>Purchased Software</u>
Systems analyst time in hours:		
Development	1,000	-0-
Modifications and testing	-0-	40
Computer charges	US \$800	US \$250
Additional hardware purchases	3,200	-0-
Incidental supplies	500	200

Question: 76 Which of the following costs are relevant to deciding whether to develop software internally?

- I. Systems analyst salary
 - II. Contractor's office usage
 - III. Contractor's hourly rate
- A. I only.
 - B. III only.
 - C. I and III.
 - D. I, II, and III.

Answer (B) is correct.

Development cost equals the cost of the outside contractor plus the costs for hardware and incidental supplies. The contractor's use of an otherwise idle office is not relevant. Also, a systems analyst's work on the new software is not relevant because it is part of the regular workload.

- A . The systems analyst's salary is not a relevant cost. It is part of the regular workload.
- C . The systems analyst's salary is not a relevant cost. It is part of the regular workload.
- D . Neither the systems analyst's salary nor the contractor's office usage are relevant costs.

Question: 77 Which of the following is not a method of allocating joint costs in a sell-or-process-further decision?

- A. Sales-value at split-off method.
- B. Estimated net realizable value (NRV) method.
- C. Internal rate of return (IRR) method.

D. Constant-gross-margin percentage NRV method.

Answer (C) is correct.

Because joint costs cannot be traced to individual products, they must be allocated. The methods available for this allocation include (1) a physical-measure-based approach, (2) the sales-value at split-off method, (3) the estimated NRV method, or (4) the constant-gross-margin percentage NRV method. The IRR method is not a method of allocating joint costs in a sell-or-process-further decision. It is the interest rate at which the net present value of an investment is zero.

A . The sales-value at split-off method is a market-based approach to allocate joint costs in a sell-or-process-further decision.

B . The estimated NRV method is a market-based approach to allocate joint costs in a sell-or-process-further decision.

D . The constant-gross-margin percentage NRV method is a market-based approach to allocate joint costs in a sell-or-process-further decision.

Fact Pattern: A manufacturing company is considering a new product for the coming year, which is an electric motor the company can purchase from a reliable vendor for US \$21.00 per unit. The alternative is to manufacture the motor internally. The company has excess capacity to manufacture the 30,000 motors needed in the coming year except for manufacturing space and special machinery. The machinery can be leased for US \$45,000 annually. Finished goods warehouse space adjoining the main manufacturing facility, leased for US \$39,000 annually, can be converted and used to manufacture the motors. Additional off-site space can be leased at an annual cost of US \$54,000 to replace the finished goods warehouse. The estimated unit costs for manufacturing the motors internally, exclusive of the leasing costs itemized above, are

Direct material	US \$ 8.00
Direct labor	4.00
Variable manufacturing overhead	3.00
Allocated fixed manufacturing overhead	5.00
Total manufacturing cost per unit	<u>US \$20.00</u>

Question: 78 Which of the following is not a relevant cost in this scenario?

- A. Rental costs of the new warehouse.
- B. Costs of the current warehouse space.
- C. Variable manufacturing overhead.
- D. Direct materials.

Answer (B) is correct.

The relevant costs of making the motor are direct materials, variable manufacturing overhead, rental costs of the special machinery, and rental costs of the new warehouse. The fixed manufacturing overhead and the costs of the current warehouse space are not relevant because they will be incurred regardless of whether the motor is made or bought.

- A . These costs are relevant. They vary with the decision made.
- C . This cost is relevant. It varies with the decision made.

Question: 79 What is the effect on a decision whether to make or buy when a firm does not have available capacity?

- A. The firm cannot make the product.
- B. Variable costs per unit increase.
- C. Fixed costs become relevant.
- D. Sunk costs are irrelevant.

Answer (C) is correct.

When capacity is not available, the differential (marginal or incremental) costs of accepting the order must be considered. Fixed costs related to reduced production of existing product lines are relevant in deciding whether to make or buy the product.

- A . A firm can still make a product if no excess capacity exists.
- B . Variable costs per unit do not necessarily increase as a result of a decision to make a product when no excess capacity exists.
- D . Sunk costs always are irrelevant. They are costs already incurred or committed to be incurred

Question: 80 A company produced and sold 100,000 units of a component. Of the units produced, 1,200 failed the company's tolerance specifications and were reworked at a cost of US \$12 per unit. Reworked units were sold as factory seconds. The result was US \$5 less in income per unit than for units that initially passed the tolerance specifications. If the company had implemented a quality assurance program to ensure that all units produced conformed to specifications, the increase in the company's contribution margin from this component would have been

- A. US \$14,400
- B. US \$20,400
- C. US \$21,600
- D. US \$39,600

Answer (B) is correct.

The cost of rework and the income lost when units were sold as factory seconds rather than first-quality units are included in the calculation. The following is the appropriate calculation: $(US \$12 + \$5) \times 1,200 = US \$20,400$.

A . The amount of US \$14,400 considers only the rework cost and excludes the income that was lost when the units were sold as factory seconds.

C . The amount of US \$21,600 does not reflect the increase in the company's contribution margin as a result of a quality assurance program.

D . The amount of US \$39,600 does not reflect the increase in the company's contribution margin as a result of a quality assurance program.

Question: 81 Which of the following costs are not relevant in a special-order decision?

A. Incremental costs.

B. Opportunity costs.

C. Outlay costs.

D. Sunk costs.

Answer (D) is correct.

Sunk costs are irrelevant to decision making because they have already been incurred.

A . Incremental costs are relevant to future decisions.

B . Opportunity costs are relevant to future decisions.

C . Outlay costs are relevant to future decisions.

Question: 82 In general, a firm should drop a product line when

A. The marginal cost of the project exceeds the marginal revenue.

B. Unavoidable costs exceed total contribution margin.

C. The marginal revenue of the project exceeds the marginal cost.

D. The selling price is less than the average cost of production.

Answer (A) is correct.

In general, if the marginal cost of a project exceeds the marginal revenue, a firm should disinvest in that product line.

B . Unavoidable costs are not relevant costs and should not be considered in determining whether a firm should disinvest from a project. If marginal revenue exceeds marginal cost, the firm should generally not disinvest in the project.

C . Disinvestment decisions are the opposite of capital budgeting decisions, as they terminate a project rather than start one.

D . A firm should not choose to disinvest in a product line solely because the selling price is less than average cost of production. If the firm has idle production capacity, only additional costs should be considered.

Question: 83 Revenues and costs that are considered relevant for decision making

1. Differ among the possible alternative courses of action
2. Are directly related to manufacturing
3. Occur in the future
4. Are avoidable

- A. 1 only.
- B. 1, 3, and 4 only.
- C. 3 and 4 only.
- D. 1, 2, 3, and 4.

Answer (B) is correct.

To be considered relevant for decision making, revenues and costs must differ among the possible alternative courses of action, occur in the future, and be avoidable.

A . Differing among possible alternative courses of action is not the only characteristic of a relevant cost or revenue.

C . Occurring in the future and being avoidable are not the only characteristics of a relevant cost or revenue.

D . A relevant cost or revenue does not have to be directly related to manufacturing.

Question: 84 Which of the following is a relevant cost?

- A. Common fixed costs when one product is dropped from the sales mix.
- B. Opportunity costs such as reduced fixed overhead in a make-or-buy decision.
- C. Variable costs of a special order also incurred in the regular production process.
- D. Joint costs in a sell-or-process further decision.

Answer (B) is correct.

Opportunity cost is the benefit forgone by not choosing the best alternative use of a scarce resource. Thus, opportunity costs are relevant to the decision-making process. Common make-or-buy decisions involving opportunity costs include whether part of (1) fixed overhead could be reduced by outsourcing and (2) the space occupied by internal production could be used more profitably for another purpose. Thus, the decision to continue making a product instead of outsourcing should consider the opportunity cost of the possible savings of fixed overhead by outsourcing.

- A . Common costs of products in the sales mix are not relevant if they are not reduced by disinvestment.
- C . Costs that do not vary with the decision made are not relevant.
- D . Joint costs are incurred before split-off and therefore are irrelevant.

Question: 85 The allocation of general overhead costs to operating departments can be least justified in determining

- A. Income of a product or functional unit.
- B. Costs for making management's decisions.
- C. Costs for the federal government's cost-plus contracts.
- D. Income tax payable.

Answer (B) is correct.

In the short run, management decisions are based on incremental costs without regard to fixed overhead costs because fixed overhead cannot be changed in the short run. Thus, the emphasis in the short run should be on controllable costs. For example, service department costs allocated as a part of overhead may not be controllable in the short run.

- A . Determining the income of a product or functional unit requires absorption (full-cost) data.
- C . Determining the costs for the federal government's cost-plus contracts requires absorption (full-cost) data.
- D . Absorption costing (full-costing) is currently required for tax purposes.

