

- LO4 Apply accounting methods for planning and control within the organization.

ANSWER ALL THE QUESTIONS

Question 1

ABC company is in the process of preparing production overhead budgets and apportioning the overheads to products, where feasible, using Activity Based Costing.

There are two production centres (machining and assembly) and one service centre (maintenance) in the factory.

Budgeted production overhead costs (OMR) are as follows:

	Machining	Assembly	Maintenance	Total
	OMR	OMR	OMR	OMR
Indirect labour	34338	32058	29780	96176
Maintenance materials	16475	1317		17792
Power				16800
Machine depreciation	72000	5300		77300
Other indirect materials	9200	2400		11600
Rent				32600
Building insurance				5120
Heat and light				6780

The following additional information is provided to enable the ABC analysis to be carried out.

1. Indirect labour, in each production centre comprises the following separate activities

Machining	OMR
Setting up	25,525(424 set-ups)
Inspection	<u>8,813(1360 inspection hours)</u>
	<u>34,338</u>

Assembly	OMR
<i>component handling</i>	17136(180 batches)
Inspection	<u>14922(180 batches)</u>
	<u>32058</u>

Each of the bracketed items above indicates the key driver of that particular activity's costs.

2. The proportion of the maintenance centre indirect labour cost relating to each production centre is:

Machining	85%
Assembly	15%
3. Power usage is

Machining	89%
Assembly	11%
4. The total maintenance cost of each production centre (ie maintenance materials plus a share of maintenance centre indirect labour) are put into cost pools, along with the cost of power and machine depreciation, all driven by the machine usage of:

Machining	14730 machine hours
Assembly	1060 machine hours
5. The key drivers of other indirect materials costs, in each of the production centres, is the value of direct materials used (which totals OMR340000).
6. Space costs (rent and rates, buildings insurance and heat and light) are not to be included in the ABC analysis as there is no casual link with final products.

Required:

- a. Determine activity based production overhead absorption rates (e.g. a cost per set up in the machining centre). (20 marks)
- b. Discuss the reasons for the development of Activity Based Costing and its limitations

(10 marks)

(Total 30 marks)

Question 2

Al Bulushi building company constructs a standard unit which sells for OMR 30000. The company's costs can be readily identifiable between fixed and variable costs.

Budgeted data for the coming six months includes the following

	Sales (units)	Profit (OMR)
January	18	70000
February	20	100000
March	30	250000
April	22	130000
May	24	160000
June	16	40000

You are told that the fixed costs for the six months have been spread evenly over the period under review to arrive at the monthly profit projections.

Required

- Calculate the total fixed costs for the period using the high low method(5marks)
- Calculate the breakeven point in terms of both units and sales revenue(10 marks)
- Prepare a breakeven chart for the six months under review. Make sure that your graph shows the following.
 - Total sales
 - Cost (fixed, variable and total)
 - Output
 - Breakeven point
 - Margin of safety
 - Total budgeted sales

(10 marks)
(Total 25 marks)

Question 3

The information given below relates to the forthcoming period for a manufacturer's operation. There are four cost centres of which two are involved in production and two are service cost centres.

	Production departments		Service departments	
Total	A	B	Canteen	Stores
OMR	OMR	OMR	OMR	OMR

Allocated Costs	70,022	21,328	29,928	8,437	10329
Other costs					
Rent and rates	4641				
Buildings insurance	3713				
Electricity and gas	6800				
Plant depreciation	28390				
Plant insurance	8517				
	<u>122,083</u>				

Area occupied ((square metres)	7,735	6,188	1,547	3,094
Plant at cost (RO000)	1,845	852	-	142
Number of employees	600	300	30	70
Machine hours	27200	800	-	-
Direct labour hours	6,800	18,000	-	-
Number of stores requisitions	27,400	3,400	-	-

Required

1. Use this information to calculate a production overhead absorption rate for department A and department B (15marks)
2. What are the problems caused by under or over absorption of overheads? (5marks)

(Total 20 marks)

Question 4

Walk Talk manufactures a cordless telephone system. At the beginning of the financial year ending 30th November 2009, the firm planned to make and sell 50000 units of its only product, the Nova, at a selling price of OMR 30 per unit. Information on standard costs used in the preparation of the budget is as follows:

Direct materials 4 per unit

Direct labour 6 per unit

Fixed productions overhead for the year were estimated at 800,000 to be absorbed on the basis of the number of units produced. There are no variable overheads.

Fixed selling and administration expenses were estimated at 100000 to be absorbed on the basis of the number of units sold.

At the beginning of the year (1st December 2008) there were no units in stock and no units were budgeted to be in stock at the end of the year (30th November 2009)

Situation as at 1 December 2009

The market for the cordless telephones has changed rapidly over the course of the past year. In response to competitive pressures, Walk –talk has had to make a number of changes both to the operating programmes within the Nova model and the range of colors available. There are now three different versions of the Nova available in a choice of eight different colours.

During the year the cost of materials and direct labour per unit has been incurred in line with standard costs although production overheads incurred during the year have risen to OMR 830,000 due to higher than expected rent review for the factory. Selling and administration costs were as budget. Production exceeded budget with 52000 units being made. However despite the changes in product specification, sales have only reached 45,000 units with 7000 units of finished systems remaining in stock on 30 November 2009. There was no stock of work in progress at the last year end.

Stocks of finished goods are to be valued on the basis of the standard cost of production.

Required:

- a) Prepare a budgeted profit and loss account for Walk –talk for the year ending 30 November 2009 using an absorption costing basis. (4 marks)
- b) Prepare the actual profit and loss account for the year ending 30 November 2009 using an absorption costing and marginal costing method. (10marks)
- c) Compare the budgeted profit with the actual profit and explain the reasons for any differences occurring. Your answer should include references to the effect of sales and overhead variances on the difference between the following.
 1. the budget and the actual profits on the absorption basis
 2. the budget and the actual profit on the marginal basis (7marks)
- d) State any concern you may have about valuing the finished stock of telephones at the year ended (30th November 2009) (4marks)

(Total 25 marks)