## GUJARAT TECHNOLOGICAL UNIVERSITY <br> MBA - SEMESTER - II • EXAMINATION - WINTER 2012

Subject code: 820001
Date: 03/01/2013
Subject Name: Cost and Management Accounting
Time: 10:30-13:30
Total Marks: 70

## Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
Q. 1 (a) Define the terms: Cost Accounting and Management Accounting. "Management Accounting is an extension of managerial aspects of Cost Accounting". Discuss.
(b) The following details are available from the records of production department of LHB Ltd.

| Details | Rs. | Rs. |
| :---: | :---: | :---: |
| Direct Materials |  | 99,500 |
| Direct Wages: |  |  |
| Machine Shop (12,000 hrs) | 31,500 |  |
| Assembly Shop (10,000 hrs) | 24,000 | 55,500 |
| Works overheads: |  |  |
| Machine Shop | 44,100 |  |
| Assembly Shop | 25,900 | 70,000 |
| Administrative overheads |  | 45,000 |
| Selling overheads |  | 40,500 |
| Distribution overheads |  | 31,050 |
| Total |  | 3,41,550 |

Assuming that the company follows absorption method of costing, you are required to:
(i) Prepare a schedule of overheads rate from the figures available stating the basis of overheads recovery rate used under the given circumstance.
(ii) Work out a cost estimate for the following job, based on overheads so composed, by considering the material consumption of two types, i.e. 25 kg. @ Rs. 16.80 per kg. and 15 kg . @ Rs. 20 per kg. Labour hour used for the Machine Shop and Assembly Shop are 30 and 42 respectively.
Q. 2 (a) You are the owner of Saffron Pharmaceutical Pvt. Ltd., which method will you
apply to ascertain the cost of the products in your company? Why? Can you apply Unit Costing method for ascertainment of cost? Why?
(b) Mars Ltd. has two divisions : A and B. Division - A has the capacity to manufacture 83,000 units of a special component (SC) annually and it has some idle capacity currently. The budgeted residual income for Division - A is Rs. 6,00,000. The relevant details extracted from the budget of Division - A are as under:
Sales (to outside customers) - 65,000 units @ Rs. 120 per unit
Variable cost per unit - Rs. 78
Divisional fixed cost - Rs. 15,00,000
Capital employed - Rs. 50,00,000

Cost of capital $\quad-18 \%$ p.a.
Division - B received an order for which it requires 18,000 units of a component similar to SC. An additional variable cost of Rs. 7 per unit will be incurred to make minor modification to SC to suit the requirement of Division - B.

Determine the minimum Transfer Price per unit which Division - A should quote to Division - B.

## OR

(b) From the following information, find out the profit made by each product apportioning joint costs on the basis of sales-value:
Joint Cost:

| Joint Cost: | Rs. | Particulars/Products: | $\underline{\mathrm{X}}$ | $\underline{\mathbf{Y}}$ |
| :---: | :---: | :---: | :---: | :---: |
| Direct Material | 1,26,000 | Selling Costs | 20,000 | 80,000 |
| Power | 25,000 | Sales | 1,52,000 | 1,68,000 |
| Petrol, oil, lubricants | 5,000 |  |  |  |
| Labour | 7,500 |  |  |  |
| Other charges | 4,100 |  |  |  |
| Total | 1,67,600 |  |  |  |

Q. 3 (a) What do you mean by Target Cost? Write the steps of target costing mechanism and phases of it.
(b) Asiana Ltd. has laid down the following standard mix:

50\% of material P @ Rs. 32 per kg.
$30 \%$ of material Q @ Rs. 24 per kg.
20\% of material R @ Rs. 64 per kg.
Normal process loss is expected to be $25 \%$ of the input which fetches no value. During a particular week, the actual mix was as follows:
Material P 150 kg . @ Rs. 30 per kg.
Material Q 30 kg . @ Rs. 28 per kg.
Material R 60 kg . @ Rs. 60 per kg.
The actual output was 240 kg . You are required to calculate: (i) Material Price Variance (ii) Material Mix Variance (iii) Material Yield Variance (iv) Material Cost Variance.

## OR

Q. 3 (a) What does it mean by Quality Costing? Describe the non-financial measures of quality and customer satisfaction.
(b) Venkat Ltd. manufactures 5,000 units of a product PC at a cost of Rs. 120 per unit. Presently, the company is utilizing $50 \%$ of the total capacity. The information pertaining to cost per unit of the product is as follows:
Direct Material
Rs. 60
Direct Labour
Rs. 25
Factory overheads
Rs. 15 (40\% fixed)
Administrative overheads
Rs. 20 ( $50 \%$ fixed)
(i) The current selling price of the product is Rs. 160 per unit.
(ii) At $60 \%$ capacity level - material cost per unit will increase by $3 \%$ and current selling price per unit will reduce by $2 \%$.
(iii) At $80 \%$ capacity level - material cost per unit will increase by $5 \%$ and current selling price per unit will reduce by $4 \%$.
Work out the budgeted profit per unit of the product of the company at $70 \%$ and $90 \%$ capacity levels.
Q. 4 (a) Name five industries where Process Costing and Operating Costing are 07
applicable. Distinguish: Normal Loss and Abnormal Loss.
(b) Aum Ltd. provides you the following data, apportion the service cost centre costs based on simultaneous equation method:

| Service Department Expenses |  |
| :---: | ---: |
| $\frac{\text { Department/Cost }}{\text { Centre }}$ | Rs. |
| X | $1,20,000$ |
| Y | 24,000 |
| Total | $1,44,000$ |

The allocation base:

| Dept./Cost <br> Centre | Production Cost Centre |  | Service Centre |  |
| :---: | :---: | :---: | :---: | :---: |
|  | A | B | X | $\mathbf{Y}$ |
| X | $60 \%$ | $35 \%$ |  | $5 \%$ |
| Y | $10 \%$ | $40 \%$ | $50 \%$ |  |
| OR |  |  |  |  |

Q. 4 (a) Define the terms BEP, Key factor and CVP analysis. Discuss the importance of 07 them in a production unit.
Q. 4 (b) The Asana Industries manufactures small capacity motors. The cost break-up of a motor is as under:
Material
Rs. 50
Labour
Rs. 80
Variable overheads $75 \%$ of labour cost
Fixed overheads of the company amount to Rs. 2,40,000 p.a. The sales price of the motor is Rs. 230 each.
(i) Determine the number of motors that have to be manufactured and sold in a year in order to break even.
(ii) How many motors to be made and sold to make a profit of Rs. 1,00,000.
(iii) If the sale price is reduced by Rs. 15 each, how many motors have to be sold to break even.
Q. 5 (a) Discuss the methods of segregating Semi-variable Costs into Fixed and 07 Variable Cost.
(b) Sunny Mafatlal sells various pottery items at regional craft fairs. His fixed costs are Rs. 4,325 p.a. The average price for a piece of pottery is Rs. 6.50, and the average variable cost is Rs. 4 per item.
(i) How many pieces of pottery must Sunny sell just to cover the expenses?
(ii) If Sunny wants to earn Rs. 7,000 profit, how many pieces of pottery must he sell?
(iii) Prepare a variable-costing income statement for earning profit of Rs. 7,000 to justify your answer.

## OR

Q. 5 (a) What are the components of price? Explain different pricing policy for the external customers.
(b) From the following details, calculate the cost per mile of Vehicle -X and Vehicle - Y:
http://www.gujaratstudy.com

| Particulars | Vehicle - X <br> (Rs.) | $\frac{\text { Vehicle - Y }}{\text { (Rs.) }}$ |
| :--- | ---: | ---: |
| Value of vehicle | 15,000 | 25,000 |
| Road tax p.a. | 500 | 500 |
| Insurance charges p.a. | 100 | 400 |
| Garage rent p.a. | 600 | 1,200 |
| Driver's wage p.m. | 200 | 400 |
| Cost of petrol per litre | 0.8 | 1.4 |
| Miles per litre | 8 | 5 |
| Miscellaneous costs per mile | 0.2 | 0.2 |
| (including tyres and maintenance) |  |  |
| Estimated life | $1,50,000 \mathrm{miles}$ | $1,50,000 \mathrm{miles}$ |
| Estimated annual milage | 6,000 | 10,000 |

