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## GUJARAT TECHNOLOGICAL UNIVERSITY <br> MBA (PART TIME) - SEMESTER 3 - EXAMINATION WINTER- 2018

Subject Code: 3539905 Date: 07/12/ 2018Subject Name: COST \& MANAGEMENT ACCOUNTING (CMA)Time: 10:30 AM to 1:30 PMTotal Marks: 70
Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
Q. 1 Define the following terms:
(a) Sunk Cost
(b) Replacement Cost
(c) Cost Object
(d) Marginal Costing
(e) Joint Cost
(f) Spilt-off point
(g) Margin of safety


Purchases raw materials Rs. 1,14,000, Carriage on purchases, Rs. 900, Sale of scrap of raw materials Rs.3,000
Wages Rs.1,78,200
Works overheads are $60 \%$ of direct labour cost.
Administration overheads are absorbed at Rs. 7.20 per unit produced.
Selling \& Distribution overheads are absorbed at $20 \%$ of selling price.
Sales - 7,600 units @ profit of $10 \%$ on sales price.
(b) What is Cost Accounting? Distinguish between 'Cost Accounting' and 07
'Financial Accounting'.

## OR

(b) Explain the Make or Buy Decisions in context of the following under
mentioned statements: If Purchase Price < Variable Cost, go for purchase proposition. If Purchase Price > Variable Cost, go for manufacturing proposition.
Q. 3 (a) Explain the concept of Transfer Pricing. 07
(b) Write a note on Kaizen costing \& Life cycle costing. $\mathbf{0 7}$
OR
Q. 3 (a) Explain the various steps involved in the decision - making process? ..... 07(b) Standard material required for manufacturing 100 kg . chemical X is given below:
45 kg . of Material A at Rs 2 per kg.
40 kg . of Material B at Rs. 4 per kg.
25 kg . of Material C at Rs. 6 per kg.
The standard loss is 10 kg .
During the $42^{\text {nd }}$ week, 2000 kg . of chemical X were produced and the actual usage of material were as follows:
Material A- 1000 kg . at Rs. 1.90 per kg.
Material B- 850 kg . at Rs. 4.20 per kg.
Material C-450 kg. at Rs. 6.50 per kg.
You are required to calculate all the necessary variances.07
Q. 4 (a) A Bright Ltd. manufactures two products- Bright and Delight, using the same equipment and similar processes. The following information is extracted from the production department pertaining to the two products for the quarter ending 31 December 2007:

| Particulars | Bright | Delight |
| :--- | :--- | :--- |
| Quantity produced (units) | 10000 | 15000 |
| Direct labour hours per unit | 2 | 4 |
| Machine-hours per unit | 3 | 1 |
| Number of set-ups in the period | 20 | 80 |
| Number of orders handled in the period | 30 | 120 |

The production overheads recovered for the period has been analysed as follows:

| Particulars | Rs. |
| :--- | :--- |
| Relating to machine activity | $4,50,000$ |
| Relating to production run set-ups | 40,000 |
| Relating to handling of orders | 90,000 |
|  | $\mathbf{5 , 8 0 , 0 0 0}$ |

You are required to calculate the production overheads to be absorbed by each unit of the products using the following costing methods:
i. A traditional coating approach, using a direct labour hour rate to absorb overheads.
ii. An ABC approach, using suitable cost drivers to trace overheads to products.
(b) XYZ Ltd. manufactures toys. Fixed Cost amount to Rs. 2,70,000 per year.

Variable costs per toy are Rs. 23, and the average price per toy is Rs. 50.
(i) How many toys must XYZ Ltd. sell to break even?
(ii) If XYZ Ltd. sells 16,000 toys in a year, what is the operating income?
(iii) If XYZ Ltd. variable costs decreases to Rs. 20 per toy while the price and fixed costs remain unchanged, what is the new break-even point?

## OR

Q. 4 The following records are available from the records of a manufacturing
company for two level of activity:

| Particulars | $\mathbf{6 0 \%}$ (Rs.) | $\mathbf{1 0 0 \%}$ (Rs.) |
| :---: | :---: | :---: |
| Direct Material | 9000 | 15000 |
| Direct wages | 6000 | 10000 |
| Indirect wages | 3000 | 5000 |
| Repair \& Maintenance | 6500 | 9500 |
| Power \& fuel | 3750 | 5750 |
| Rent | 12000 | 12000 |
| Depreciation | 10000 | 10000 |
| Insurance | 6000 | 6000 |
| Administrative overheads | 10000 | 14000 |
| Selling overheads | 6000 | 8000 |

Total production at $100 \%$ capacity is 5000 units. Draw up Flexible Budget at $70 \%, 90 \%$ and $110 \%$ of normal capacity.
Q. 5 CASE STUDY:

Rahul Ltd. is engaged in process engineering industry. During the month of April, 2,000 units were introduced in Process A. The normal loss was estimated at $5 \%$ of input. At the end of the month, 1,400 units had been produced and transferred to Process B, 460 units were incomplete. The entire process had to be scrapped. The incomplete units had reached the following stages of completion:
Materials $75 \%$ completed
Labour 50 \% completed
Overheads 50 \% completed
Following are the additional information on Process A:
Cost of 2,000 units Rs. 58,000
Additional Direct Materials Rs. 14,400
Direct Labour Rs. 33,400
Direct Overheads Rs. 16,700
Units scrapped realized Rs. 10 each
You are required to prepare the following:
(i) Statement of Equivalent Production,
(ii) Statement of Cost per Equivalent Units,
(iii) Statement of Evaluation;

## OR

## Q. 5 CASE STUDY:

Vinayak Ltd. operating at $75 \%$ level of activity produces and sells two products, A and B. The cost sheets of the two products are as under:

| Particulars | Product A | Product B |
| :--- | :--- | :--- |
| Units produced and sold | 600 | 400 |
| Direct Materials | Rs. 2 | Rs. 4 |
| Direct Labour | Rs. 4 | Rs. 4 |
| Factory overheads (40\% fixed) | Rs. 5 | Rs. 3 |
| Selling and administration | Rs. 8 | Rs.5 |
| overheads (60\% fixed) |  |  |
| Total cost per unit | Rs. 19 | Rs. 16 |
| Selling price per unit | Rs. 23 | Rs. 19 |

Factory overheads are absorbed on the basis of machine-hours which is
limiting factor. The machine hour rate is Rs. 2 per hour.
The company received an offer from the purchase of product A at a price of Rs. 17.5 per unit. Alternatively, the company has another offer from the Middle East for the purchase of product B at a price of Rs. 15.5 per unit. In both the cases, a special packing charge of Rs. 0.50 per unit has to be borne by the company.
The company can accept either of the two export orders by utilizing the balance of $25 \%$ of its capacity.
You are required to prepare:
(i) A statement showing the economics of the two export proposals
giving your recommendations as to which proposals should be accepted, and
(ii) A statement showing the overall profitability of the company after incorporating the export proposals recommended by you.

