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## AF-138 <br> April-2015 <br> T.Y. M.B.A., Sem.-VI (Integrated) <br> Cost \& Management Accounting

## Time : 3 Hours]

[Max. Marks : 100

1. (a) Meaning of Cost Accounting and its objectives.
(b) Explain any two methods of Joint Product and By Product. 4
(c) The following data related to Process Q :


Required : Prepare
(1) Equivalent units statement
(2) Statement of cost per equivalent unit and total cost
(3) Process Q Account
(4) Any other account necessary.
2. (a) Prakash and Co. manufacture two products $\mathrm{X}-1$ and $\mathrm{X}-2$. The following overhead activities are involved :
Power, maintenance, factory supervision and quality inspections. The expected costs for these activities are follows :

| Power | $2,20,000$ |
| :--- | ---: |
| Maintenance | $2,00,000$ |
| Factory Supervision | $1,56,000$ |
| Quality Inspections | 90,000 |
| $\mathbf{6 , 6 6 , 0 0 0}$ |  |

The activity drivers for each product are follows :

## Overhead Cost

Power
Maintenance
Factory supervision
Quality inspections

## Activity Driver

Kilowatt hours
Area occupied
Number of Employees
Number of Inspections

The amounts of activity drivers for each product are given below :

| Product | kW hours | Area <br> (Sq. meter) | No. of <br> Employees | No. of <br> Inspection |
| :---: | :---: | :---: | :---: | :---: |
| X-1 | $4,00,000$ | 875 | 48 | 144 |
| X-2 | $6,00,000$ | 1625 | 72 | 216 |
| Total | $\mathbf{1 0 , 0 0 , 0 0 0}$ | $\mathbf{2 5 0 0}$ | $\mathbf{1 2 0}$ | $\mathbf{3 6 0}$ |

Compute an overhead application rate for each activity and allocate the overhead costs of each product.
(b) Differentiate between Marginal Costing and Absorption Costing.
3. (a) The following particulars are extracted from the records of a company :

| Particulars | Product A <br> Per unit <br> ₹ 100 | Product B <br> Per unit <br> $₹ 120$ |
| :--- | :--- | :---: |
| Sales | 2 kg | 3 kg |
| Consumption of Material | $₹ 10$ | $₹ 15$ |
| Material Cost | $₹ 15$ | $₹ 10$ |
| Direct wages cost | $₹ 5$ | $₹ 5$ |
| Direct Expenses | 3 | 2 |
| Machine hours used |  |  |
| Overhead Expenses: | $₹ 5$ | $₹ 10$ |
| $\quad$ Fixed $\quad$ Variable | $₹ 15$ | $₹ 20$ |

$\rightarrow \quad$ Direct Wages per hour is ₹ 5
$\rightarrow \quad$ Assuming raw material as the key factor, availability of which is 10000 kg and maximum sales potential of each product being 3500 units, find out the product mix which will yield the maximum profit.
(b) Attempt any three :
(i) The following information is related to a business unit :

| Days | Sales (₹) | Profit (₹) |
| :---: | :---: | :---: |
| Monday and Tuesday | $1,00,000$ | 21,000 |

$\rightarrow$ Tuesday's sales and profit ₹ 15,000 and ₹ 9,000 respectively are more than Monday.
$\rightarrow \quad$ Calculate Break Even Sales
(ii) C.V.P. Analysis
(iii) Relevant Cost and Sunk Cost
(iv) Imputed Cost and Discretionary Cost
4. (a) Good Morning Ltd. is currently operating at $75 \%$ of its capacity. In the past two years, the level of operations were $55 \%$ and $65 \%$ respectively. Presently the production is 75,000 units. The company is planning for $85 \%$ capacity level during 2014-15. The cost details are as follows :

| Particulars | $\mathbf{5 5 \%}$ <br> $(₹)$ | $\mathbf{6 5 \%}$ <br> $(₹)$ | $\mathbf{7 5 \%}$ <br> $(₹)$ |
| :--- | ---: | ---: | ---: |
| Direct Material | $11,00,000$ | $13,00,000$ | $15,00,000$ |
| Direct Labour | $5,50,000$ | $6,50,000$ | $7,50,000$ |
| Factory Overheads | $3,10,000$ | $3,30,000$ | $3,50,000$ |
| Selling Overheads | $3,20,000$ | $3,60,000$ | $4,00,000$ |
| Administrative Overheads | $1,60,000$ | $1,60,000$ | $1,60,000$ |

Profit is estimated at $20 \%$ on sales :
$\rightarrow \quad$ The following increases in costs are expected during the year :

- Direct Material

8\%

- Direct Labour 5\%
- Variable Factory Overheads 5\%
- Variable Selling Overheads $8 \%$
- Fixed Factory Overheads 10\%
- Fixed Selling Overheads $15 \%$
- Administrative Overheads $10 \%$
$\rightarrow$ Prepare Flexible Budget at $85 \%$ capacity for the year 2014-15.
(b) Attempt any two :
(i) Objectives of Budgetory Control
(ii) Cost control and Cost Reduction
(iii) Classification of Budgets according to Flexibility

5. (a) The Standard Material cost for a normal mix of one tonne of chemical X is based on :

| Chemical | Usage (kg.) | Price per kg. (₹) |
| :---: | :---: | :---: |
| A | 240 | 6 |
| B | 400 | 12 |
| C | 640 | 10 |

$\rightarrow \quad$ During a month 6.25 tonnes of X were produced from
Chemical Consumption Cost (₹) (tonnes)

| A | 1.6 | 11,200 |
| :--- | :--- | :--- |
| B | 2.4 | 30,000 |
| C | 4.5 | 47,250 |
|  | $\mathbf{8 . 5}$ | $\mathbf{8 8 , 4 5 0}$ |

$\rightarrow \quad$ Analyse the variances.
(b) The following information was obtained from the records of a manufacturing unit using Standard Costing System :

| Particulars | Standard | Actual |
| :--- | :---: | :---: |
| Production | 4,000 units | 3,800 units |
| Working Days | 20 | 21 |
| Fixed overhead | $₹ 40,000$ | $₹ 39,000$ |
| Variable Overhead | 12,000 | 12,000 |

$\rightarrow \quad$ You are required to calculate the following overhead variances :
(a) Variable Overhead Variances
(b) Fixed Overhead Variances

