## 5/H-76 (xii) (Syllabus-2015)

## 2022

( February )

## COMMERCE

( Honours )

## ( Cost Accounting )

( BC-502 )

Marks : 75
Time : 3 hours
The figures in the margin indicate full marks for the questions

1. Define cost accounting and discuss briefly its objectives. Explain how it helps the management in the period of trade depression and trade competition. $1+4+5+5=15$

## Or

Medical Company manufactures special items $A$ and $B$. The following particulars are collected for the year, 2020 :
(i) Average consumption-40 units
(ii) Normal usage-50 units per week each
(iii) Minimum usage-25 units per week each
(iv) Maximum usage-75 units per week each
(v) Reorder quantity- $A: 300$ units $B: 500$ units
(vi) Reorder period- $A: 4$ to 6 weeks

$$
B: 2 \text { to } 4 \text { weeks }
$$

Compute (a) Maximum Stock Level,
(b) Minimum Stock Level, (c) Reorder Level,
(d) Reorder Quantity and (e) Average Stock Level.
2. $M$ Ltd. has three production departments $(X$, $Y$ and $Z)$ and two service departments ( $S 1$ and $S 2$ ). The following is the budget for December 2020 :

| Items | Total | $X$ | $Y$ | $Z$ | S1 | S 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct material (₹) | 30,000 | 3,000 | 6,000 | 12,000 | 6,000 | 3,000 |
| Direct wages (₹) | 57,000 | 15,000 | 6,000 | 24,000 | 6,000 | 6,000 |
| Other overheads ( ${ }^{₹}$ ) | 27,000 |  |  |  |  |  |
| Depreciation (F) | 3,000 |  |  |  |  |  |
| Factory rent (F) | 12,000 |  |  |  |  |  |
| Power (₹) | 7,500 |  |  |  |  |  |
| Additional information : |  |  |  |  |  |  |
| Floor area (sq.ft.) | 3000 | 750 | 375 | 750 | 375 | 750 |
| Capital value of assets ( $₹$ in lakhs) | 150 | 30 | 60 | 30 | 15 | 15 |
| Machinery hours | 9000 | 1000 | 2000 | 4000 | 1000 | 1000 |
| Horsepower of machinery | 150 | 50 | 30 | 30 | 15 | 25 |

The expenses of service departments $S 1$ and S2 are apportioned as follows :

| Departments | $X$ | $Y$ | $Z$ | $S 1$ | $S 2$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $S 1$ | $45 \%$ | $15 \%$ | $30 \%$ | - | $10 \%$ |
| $S 2$ | $60 \%$ | $35 \%$ | - | $5 \%$ | - |

You are required to prepare-
(a) a statement showing distribution of overhead to various departments;
(b) a statement showing redistribution of service department expenses to production department using simultaneous equation method.

$$
7 \frac{1}{2}+7^{1 / 2}=15
$$

Or
(a) The following data are obtained from the books for the year ended 31-12-2020 :

|  | $(₹)$ |
| :--- | :---: |
| Direct materials | 90,000 |
| Direct wages | 75,000 |
| Profit | 60,900 |
| Administration overhead | 42,000 |
| Selling \& distribution |  |
| $\quad$overhead | 52,500 |
| Factory overhead | 45,000 |

Prepare a Cost Sheet.
(b) In 2021, the factory receives an order for a number of jobs. It is estimated that direct materials required will be $₹ 1,20,000$ and direct labour cost is $₹ 75,000$. What should be the price for these jobs if the factory intends to earn the same rate of profit on sales assuming that the selling and distribution expenses have gone up by $15 \%$ ? The factory recovers factory overhead as a percentage of direct wages and administration and selling and distribution overhead as a percentage of works cost, based on cost rates prevailing in the previous year.
3. Marak Ltd. processes a patent material used in buildings. The material is used in three consecutive grades-soft, medium and hard. The following information has been obtained regarding production :

|  | Process |  |  |
| :--- | :---: | :---: | :---: |
|  | $I$ | $I I$ | III |
| Raw material used | 1000 | - | - |
| Cost per ton $(₹)$ | 200 | - | - |
| Weight lost |  |  |  |
| $\quad$ (\% of input) | $5 \%$ | - | - |
| Scrap (sale price <br> $\quad ₹ 50$ per ton) | 50 ton | 30 ton | 51 ton |
| Sale price per ton $(₹)$ | 350 | 500 | 80 |

Management expenses were $₹ 17,500$ and selling expenses $₹ 10,000$ are not to be allocated in the processes. Two-third of the output of process I and half of the output of process II are passed on to next process and the balances are sold. The entire output of process III is sold. You are required to prepare the three process accounts and a statement of profit.

## Or

A contractor undertook a contract for constructing a building. The contract price was $₹ 15,00,000$ and the contract commenced on 1st January, 2020. During the year, the following expenses were incurred over the contract :

| Material issued from stores | 10,000 |
| :--- | ---: |
| Material purchased | $3,00,000$ |
| Labour | $2,50,000$ |
| Indirect expenses | 90,000 |
| Plant | $8,50,000$ |
| Material returned to stores | 20,000 |
| Material lost by fire | 5,000 |
| Materials at site | 15,000 |
| Plant at site (31-12-20) | $8,00,000$ |
| Work uncertified | 20,000 |
| Cash received from contractee |  |
| (80\% of work certified) | $5,60,000$ |

Prepare Contract A/c and WIP A/c, and show how it will appear in the Balance Sheet of 31-12-2020.
$9+3+3=15$
4. (a) Calculate-(i) P/V ratio, (ii) fixed cost, (iii) the volume (in units) of production to break-even (iv) the volume of production (in units) to earn a profit of $₹ 40,000$ from the following information :
Selling price per unit is $₹ 100$. The company sold in successive periods 7000 units and 5000 units and has incurred a loss of $₹ 10,000$ and earned a profit of $₹ 10,000$ respectively.
(b) Taking hypothetical figures, draw a break-even chart.

## Or

A practicising Chartered Accountant now spends $₹ 18$ per kilometre on taxi fare for his clients' work. He is considering two alternatives, purchase of a new small car or an old bigger car. The estimated cost figures are as follows :

\left.| Items | New | Old bigger |
| :--- | ---: | ---: |
| small car | car |  |$\right\}$| curchases price (₹) | $7,00,000$ | $4,00,000$ |
| :--- | ---: | ---: |
| Sale price after 5 years (₹) | $3,80,000$ | $2,40,000$ |
| Repairs and servicing per | 20,000 | 24,000 |
| $\quad$ annum (₹) |  |  |
| Taxes and insurance per | 34,000 | 14,000 |
| $\quad$ annum (₹) | 10 | 7 |
| Petrol consumption per litre (km) | 70 | 70 |
| Petrol price per litre (₹) |  |  |

He estimates that he travels 10000 km annually. Which of the three alternatives will be cheaper? If his practice expands and he has to travel 19000 km per annum, what would be his decision? At how many km per annum the cost of the two cars break-even and why? Ignore interest and income tax.
5. The details regarding the composition and the weekly wage rates of labour force engaged on a job scheduled to be completed in 30 weeks are as follows :

| Category of <br> workers | Standard |  | Actual |  |
| :---: | :---: | :---: | :---: | :---: |
|  | No. of <br> labourers | Weekly <br> wage rate <br> per worker | No. of <br> labourers | Weekly <br> wage rate <br> per worker |
| Skilled | 75 | 60 | 70 | 70 |
| Semi-skilled | 45 | 40 | 30 | 50 |
| Unskilled | 60 | 30 | 80 | 20 |

The work is actually completed in 32 weeks. Calculate all possible labour variances.

Define flexible budget. State the objectives and advantages of a flexible budget.

$$
3+6+6=15
$$

