## PAPER - 8

COST ACCOUNTING

The figures in the margin on the right side indicate full marks.

## SECTION - A

1. Multiple Choice Questions:
$[15 \times 2=30]$
(i) $\qquad$ deals with the principles and methods of determining the production or operation overheads.
a. CAS-3
b. CAS-5
c. CAS-9
d. CAS-16
(ii) Time and motion study is conducted by the $\qquad$ .
a. Time -keeping department
b. Personnel department
c. Payroll department
d. Engineering department
(iii) Royalty paid on sales $₹ 89,000$ and Software development charges related to product is ₹22,000. Calculate Direct Expenses.
a. ₹ $1,11,100$
b. ₹ $1,11,000$
c. ₹ $1,11,110$
d. ₹ $1,10,000$
(iv) Marginal Costing technique follows which of the following basis of classification?
a. Element wise
b. Function wise
c. Behaviour
d. Identifiability wise
(v) If an organization has all the resources it needs for production, then the principal budget factor is most likely to be $\qquad$ .
a. non-existing
b. sales demand
c. raw materials
d. labour supply

## PAPER - 8

COST ACCOUNTING
(vi) In process, conversion cost means $\qquad$ .
a. Cost of direct materials, direct labour, direct expenses
b. Direct labour, direct expenses, indirect material, indirect labour, indirect expenses
c. Prime cost plus factory overheads
d. All costs up to the product reaching the consumer, less direct material costs
(vii) If sales are ₹ 150,000 and variable cost are ₹ 50,000 . Compute $\mathrm{P} / \mathrm{V}$ ratio.
a. $66.66 \%$
b. $100 \%$
c. $133.33 \%$
d. $65.66 \%$
(viii) Selling and distribution overheads are absorbed on the basis of $\qquad$ .
a. rate per unit.
b. percentage on works cost.
c. percentage on selling price of each unit.
d. Any of the above
(ix) In a process 800 units are introduced during 2022-23.5\% of input is normal loss. Closing work-in-progress $60 \%$ complete is 100 units. 660 completed units are transferred to next process. Equivalent production for the period is $\qquad$ .
a. 760 units
b. 744 units
c. 540 units
d. 720 units
(x) A hotel having 100 rooms of which $80 \%$ are normally occupied in summer and $25 \%$ in winter. Period of summer and winter be taken as 6 months each and normal days in a month be assumed to be 30 . The total occupied room days will be $\qquad$ .
a. 1525 Room days
b. 18900 Room days
c. 36000 Room days
d. None of the above
(xi) Integral accounts eliminate the necessity of operating $\qquad$ .
a. Cost Ledger Control Account
b. Store Ledger Control Account
c. Overhead Adjustment Account
d. None of the above
(xii) Batch Costing is suitable for $\qquad$ .
a. Sugar Industry

## PAPER - 8

COST ACCOUNTING
b. Chemical Industry
c. Pharma Industry
d. Oil Industry
(xiii) In which of the following incentive plan of payment, wages on time basis are not Guaranteed?
a. Halsey plan
b. Rowan plan
c. Taylor's differential piece rate system
d. Gantt's task and bonus system
(xiv) During a period 13600 labour hours were worked at a standard rate of ₹ 8 per hour. The direct labour efficiency variance was ₹ 8,800 (Adv). How many standard hours were produced?
a. 12000 hours
b. 12500 hours
c. 13000 hours
d. 13500 hours
(xv) Difference between standard cost and actual cost is called as $\qquad$ .
a. Wastage
b. Loss
c. Variance
d. Profit

## SECTION-B

(Answer any five questions out of seven questions given. Each question carries $\mathbf{1 4}$ Marks)
2. (a) From the following information, illustrate and prepare a statement showing profit for the period and determine Cost per Unit.
1.

|  | Opening | Closing |
| :--- | :---: | :---: |
| Raw Materials: | $₹ 29,500$ | $₹ 36,000$ |
| Work-in-progress: |  |  |
| Material | 13,600 | 12,000 |
| Wages | 11,000 | 16,500 |
| Works overhead | 6,600 | 9,900 |
| Finished Goods: | 200 units@ $₹ 84$ | 1600 Units |

2. Purchases of raw material $₹ 1,90,000$, Carriage on purchases ₹ 1,500 , Sale of scrap of raw materials ₹ 5,000
3. Wages ₹2,97,000
4. Works overheads are absorbed @ $60 \%$ of direct labour cost.
5. Administration overhead are absorbed @ ₹ 12 per unit produced.

INTERMEDIATE
SET 1
TERM - DEC 2023
PAPER - 8
COST ACCOUNTING
6. Selling and distribution overhead are absorbed @ $20 \%$ of selling price.
7. Sales -7600 units at a profit of $10 \%$ on sales price.
(b) PQR Tubes Ltd. are the manufacturer of picture tubes of T.V. The following are the details of their operations during 2022-2023.

| Ordering cost | $₹ 100$ per order | Inventory carrying <br> cost | $20 \%$ p.a. |
| :--- | :--- | :--- | :--- |
| Cost of tubes | $₹ 500$ per tube | Normal usage | 100 tubes per <br> week |
| Minimum usage | 50 tubes per week | Maximum usage | 200 tubes per <br> week |
| Lead time to supply | $6-8$ weeks |  |  |

Compute:
(i) Economic order quantity. If the supplier is willing to supply quarterly 1,500 units at a discount of $5 \%$, is it worth accepting?
(ii) Re-order level;
(iii) Maximum level of stock;
(iv) Minimum level of stock.
3.(a) A Company has three production cost centers $\mathrm{A}, \mathrm{B}$ and C are two service cost centres X and Y. Cost allocated to service centres are required to be apportioned to the production centres to find out cost of production of different products.
It is found that benefit of service cost centres is also received by each other along with production cost centres.

Overhead cost as allocated to the five cost centres and estimates of benefit of service cost centres received by each of them are as under:

| Cost Centres | Overhead costs as <br> allocated | Estimates of benefits received from <br> service centres <br> $(\%)$ |  |
| :---: | :---: | :---: | :---: |
|  |  | X | Y |
| A | 80,000 | 20 | 20 |
| C | 40,000 | 30 | 25 |
| X | 20,000 | 40 | 50 |
| Y | 20,000 | -- | 5 |

SET 1
INTERMEDIATE
TERM - DEC 2023
PAPER - 8
COST ACCOUNTING

## Required:

Compute the final overhead costs of each of the production department including reapportioned cost of service centres using -
(A) Continuous distribution method and
(B) Simultaneous equation method
(b) M/s Mysore Petro Ltd. showed a net loss of ₹ $2,08,000$ as per their financial accounts for the year ended 31st March, 2023. The Cost Accounts, however, disclosed a net loss of ₹ $1,64,000$ for the same period. The following information was revealed as a result of the scrutiny of the figures of both the sets of books.

1. Factory overhead under recovered
₹ 3,000
2. Administration overhead over recovered
3. Depreciation charged in financial books
4. Depreciation recovered in costs
5. Interest on investment not included in costs
6. Income-tax provided
7. Transfer fee (in financial Books)
8. Stores adjustment (credit in financial books)

Prepare Reconciliation Statement.
4. (a) From the following information relating to a hotel, calculate the room rent to be charged to give a profit of $25 \%$ on cost excluding interest
(i) Salaries of staff: ₹ $1,02,200$ p.a.
(ii) Wages of the room attendant: ₹ 4 per day

There is a room attendant for each room. He is paid wages only when the room is occupied
(iii) Lighting, Heating and Power
A. The normal lighting expenses for each room from the whole month is ₹ 100 when occupied
B. Power is used only in winter and the charges are ₹ 40 for a room, when occupied.
(iv) Repairs to buildings: ₹ 10,000 p.a.
(v) Licence etc.: ₹4,800 p.a.
(vi) Sundries: ₹6,600 p.a.
(vii) Interior decoration and furnishing: ₹ 10,000 p.a.
(viii) Depreciation @ $5 \%$ is to be charged on buildings costing ₹ $4,00,000$ and $10 \%$ on equipments.
(ix) Interest to be charged @ $20 \%$ on investment in building and equipments amounting to ₹5,00,000
(x) There are 100 rooms in the hotel $80 \%$ of the rooms are generally occupied in summer and $30 \%$ in winter. The period of summer and winter may be considered to be of 6 months in each case: A month may be assumed of 30 days.

PAPER - 8
COST ACCOUNTING
(b) Deluxe limited undertook a contract for ₹ $5,00,000$ on 1st July, 2022. On 30th June 2023 when the accounts were closed, the following details about the contract were gathered:

| Materials purchased | $1,00,000$ |
| :--- | ---: |
| Wages paid | 45,000 |
| General expenses | 10,000 |
| Plant Purchased | 50,000 |
| Materials on hand 30.6 .2023 | 25,000 |
| Wages accrued 30.6 .2023 | 5,000 |
| Work certified | $2,00,000$ |
| Cash received | $1,50,000$ |
| Depreciation of Plant | 5,000 |
| Work uncertified | 15,000 |

The above contract contained an escalator clause which read as follows:
"In the event of prices of materials and rates of wages increase by more than $5 \%$ the contract price would be increased accordingly by $25 \%$ of the rise in the cost of materials and wages beyond $5 \%$ in each case".
It was found that since the date of signing the agreement the prices of materials and wage rates increased by $25 \%$ the value of the work certify does not take into account the effect of the above clause.
Prepare the contract account. Working should form part of the answer.
5.(a) A product passes through two processes. The output of Process I becomes the input of Process II and the output of Process II is transferred to warehouse. The quantity of raw materials introduced into process I is $20,000 \mathrm{kgs}$. at ₹ 10 per kg . The cost and output data for the month under review are as under:

| Particulars | Process I | Process II |
| :--- | ---: | ---: |
| Direct materials | $₹ 60,000$ | $₹ 40,000$ |
| Direct labour | $₹ 40,000$ | $₹ 30,000$ |
| Production overheads | $₹ 39,000$ | $₹ 40,250$ |
| Normal loss | $8 \%$ | $5 \%$ |
| Output | 18,000 | 17,400 |
| Loss realization of ₹/Unit | 2.00 | 3.00 |

The company's policy is to fix the selling price of the end product in such a way as to yield a profit of $20 \%$ on selling price.
Required: (i) Prepare the Process Accounts, (ii) Determine the selling price per unit to the end product.

## PAPER - 8

COST ACCOUNTING
(b) The standard material inputs required for $1,000 \mathrm{kgs}$. of a finished product are given below:

| Material | Quantity <br> (in kg ) | Standard rate per kg. <br> (in ₹) |
| :---: | :---: | :---: |
| P | 450 | 20 |
| Q | 400 | 40 |
| R | 250 | 60 |
| Standard loss | 1,100 |  |
|  | 100 |  |

Actual production in a period was $20,000 \mathrm{kgs}$. of the finished product for which the actual quantities of material used and the prices paid thereof, are as under:

| Material | Quantity <br> (in kgs) | Standard rate per kg. <br> (in ₹) |
| :---: | :---: | :---: |
| P | 10,000 | 19 |
| Q | 8,500 | 42 |
| R | 4,500 | 65 |

Calculate:
(i) Material Cost Variances;
(ii) Material Price Variance;
(iii) Material Usage Variance;
(iv) Material Mix Variance;
(v) Material Yield Variance.

Present a reconciliation among the variances.
6. The Chief Cost Accountant of a company running an orchard with an adequate supply of labour, presents the following data and request you to advise about the area to be allotted for the cultivation of various types of fruits, which would result in maximization of profits.

The company contemplates growing Apples, Lemons, Oranges and Peaches:

| Particulars | Apples | Lemons | Oranges | Peaches |
| :--- | ---: | ---: | ---: | ---: |
| Selling Price per box $(₹)$ | 15 | 15 | 30 | 45 |
| Season yield in boxes <br> per acre | 500 | 150 | 100 | 200 |

PAPER - 8
COST ACCOUNTING

| Costs: | $₹$ | $₹$ | $₹$ |  |
| :--- | ---: | ---: | ---: | ---: |
| Material per acre | 270 | 105 | 90 | 150 |
| Labour: Growing per <br> acre | 300 | 225 | 150 | 195 |
| Picking and Packing per <br> box | 1.50 | 1.50 | 3 | 4.50 |
| Transport per box | 3 | 3 | 1.50 | 4.50 |

The Total Fixed Costs in each season would be ₹ $2,10,000$
The following limitations are also placed before you.
(i) The area available is 450 acres but not of this, 300 acres are suitable for growing only oranges and lemons. The balance of 150 acres is suitable for growing any of the four fruits.
(ii) The marketing strategy of the company requires the compulsory production of all the four types of fruits in a season and the minimum quantity of any one type to be 18,000 boxes. Calculate the total profit that would accrue if your advice is followed.
7. (a) A factory is currently running at $50 \%$ capacity and produces 5,000 units at a cost of ₹ 90 per unit as per details below:

| Material |  |  | ₹50 |
| :--- | :--- | :--- | :--- |
| Labour | 15 |  |  |
| Factory Overheads | 15 (₹ 6/-fixed) |  |  |
| Administrative Overheads | 10 (₹ 5/-fixed) |  |  |

The current selling price is ₹ 100 per unit.
At $60 \%$ working, material cost per unit increase by $2 \%$ and selling price per unit falls by 2\%.
At $80 \%$ working, material cost per unit increase by $5 \%$ and selling price per unit falls by $5 \%$.
Compute and estimate profits of the factory at $60 \%$ and $80 \%$ working and offer your comments.
(b) Describe the objectives and functions of Cost Accounting Standards Board.
8. (a) Explain the objectives of cost accounting.
(b) Summarize the principle of measurement of direct expenses as per CAS-10.
(c) Prepare a statement showing the differences between 'Bin Card' and 'Stores Ledger. [5]

