## MOCK TEST PAPER -1

## INTERMEDIATE: GROUP - I

## PAPER - 3: COST AND MANAGEMENT ACCOUNTING

Answers are to be given only in English except in the case of the candidates who have opted for Hindi medium. If a candidate has not opted for Hindi medium his/ her answer in Hindi will not be valued.

Question No. 1 is compulsory.
Attempt any four questions from the remaining five questions.
Working notes should form part of the answer.

## Time Allowed - 3 Hours

Maximum Marks - 100

1. Answer the following:
(a) Joy Toy Limited deals in trading of 'superhero' toy figure. The annual demand for the toy car is 14,400 units. The company incurs fixed order placement and transportation cost of ₹ 212 each time an order is placed. Each toy costs ₹ 450 and the trader has a carrying cost of 25 percent p.a. The company has been offered a quantity discount of $8 \%$ on the purchase of 'superhero' toy figure provided the order size is 5,000 units at a time.
Required:
(i) COMPUTE the economic order quantity
(ii) STATE whether the quantity discount offer can be accepted.
(b) CALCULATE (i) Efficiency ratio (ii) Activity Ratio (iii) Capacity Ratio. The relevant data is as below: Budgeted Production 1,44,000 units

Standard Hours per unit 12
Actual Production 1,20,000 units
Actual Working Hours 12,00,000
(c) Mithi Treat (MT) owns a confectionary store which sells items like sweets, cake, chocolates. MT use to produce at most 40 units of any item at a time. It has received an order for 800 chocolates from a customer. To process a batch of 40 chocolates, the following cost would be incurred:
Direct materials- ₹ 600
Direct wages-₹ 55
Oven set- up cost ₹ 175
MT absorbs production overheads at a rate of $25 \%$ of direct wages cost. $15 \%$ is added to the total production cost of each batch to allow for selling, distribution and administration overheads.
MT requires a profit margin of $25 \%$ of cost.
DETERMINE the selling price for 800 Chocolates.
(d) Secure lifeline Ltd. operates in life insurance business. It launched a new insurance policy 'Total secure'. The company has incurred the following expenditures during the last year for the policy:

|  | ₹ |
| :--- | ---: |
| Cost of marketing of the policy | $74,58,000$ |
| Sales support expenses | $18,89,250$ |
| Policy issuance cost | $16,59,735$ |
| Claims management cost | $2,07,240$ |
| Policy development cost | $18,56,250$ |
| Postage and logistics | $16,91,250$ |
| Facilities cost | $25,14,600$ |
| Policy servicing cost | $58,09,155$ |
| Employees cost | $9,24,000$ |
| IT cost | $1,22,62,800$ |
| Office administration cost | $26,73,660$ |

Number of policies sold- 844.
Total insured value of policies - ₹ 1,640 crore.
Required:
(i) CALCULATE total cost for Professionals Protection Plus' policy segregating the costs into four main activities namely (a) Marketing and Sales support, (b) Operations, (c) IT and (d) Support functions.
(ii) CALCULATE cost per policy.
(iii) CALCULATE cost per rupee of insured value.
2. (a) Following information obtained from the records of a Manufacturing Company for the month of March:

Direct labour cost ₹ 25,000 being $150 \%$ of works overheads.
Cost of goods sold excluding administrative expenses ₹ 75,000.
Inventory accounts showed the following opening and closing balances:

|  | March 1 (₹) | March 31 (₹) |
| :--- | ---: | ---: |
| Raw materials | 11,600 | 15,370 |
| Work-in-progress | 15,225 | 21,025 |
| Finished goods | 25,520 | 27,550 |


| Other information is as follows: |  |
| :--- | ---: |
|  | $(₹)$ |
| Selling expenses | 6,125 |
| General and administration expenses | 4,375 |
| Sales for the month | $1,05,250$ |

## Required to:

(i) FIND out the value of materials purchased.
(ii) PREPARE a cost statement showing the various elements of cost and also the profit earned.
(10 Marks)
(b) Following data is extracted from the books of RAMZY Ltd. for the month of March:
(i) Estimation-

| Particulars | Quantity (kg.) | Price (₹) | Amount (₹) |
| :--- | ---: | ---: | ---: |
| Material-A | 1320 | $?$ | -- |
| Material-B | 990 | 50 | 49500 |
|  |  |  |  |

Normal loss was expected to be $5 \%$ of total input materials.
(ii) Actuals- $2,500 \mathrm{~kg}$ of output produced.

| Particulars | Quantity (kg.) | Price (₹) | Amount (₹) |
| :--- | ---: | ---: | ---: |
| Material-A | 1500 | $?$ | -- |
| Material-B | $?$ | 53 | -- |
|  |  |  | 98,000 |

(iii) Other Information-

Material Cost Variance $=₹ 5,500(F)$
Material Price Variance $=₹ 300$ (F)
You are required to CALCULATE:
(i) Standard Price of Material-A;
(ii) Actual Quantity of Material-B;
(iii) Actual Price of Material-A;
(iv) Revised standard quantity of Material-A and Material-B; and
(v) Material Mix Variance.
(10 Marks)
3. (a) SoyaB Limited is presently operating at $50 \%$ capacity and producing 50,000 units. The entire output is sold at a price of Rs. 180 per unit. The cost structure at the $50 \%$ level of activity is as under:

|  | (₹) |
| :--- | ---: |
| Direct Material | 60 per unit |
| Direct Wages | 20 per unit |
| Variable Overheads | 20 per unit |
| Direct Expenses | 12 per unit |
| Factory Expenses (30\% fixed) | 16 per unit |
| Selling and Distribution Exp. (85\% variable) | 10 per unit |
| Office and Administrative Exp. (100\% fixed) | 6 per unit |

The company anticipates that the variable costs will go up by $20 \%$ and fixed costs will go up by 10\%.

You are required to prepare an Expense budget, based on marginal cost for the company at $50 \%, 75 \%$ and $100 \%$ level of activity and find out the profits at respective levels.
(10 Marks)
(b) LNP Ltd. and MNT Ltd. are engaged in manufacturing of identical products. Existing revenue and cost data is as follows:

|  | LNP Ltd. (₹) | MNT Ltd. (₹) |
| :--- | ---: | ---: |
| Sales | $13,60,000$ | $17,00,000$ |
| Variable Cost | $10,88,000$ | $10,20,000$ |
| Fixed Cost | $1,72,000$ | $5,80,000$ |

You are required to calculate:
(i) Break-even point (in Value) for each company

Sales at which each company will earn a profit of ₹ $5,00,000$.
Sales at which both companies will have same profits.
(10 Marks)
4. (a) SM Pvt. Ltd. manufactures their products in three consecutive processes. The details are as below:

|  | Process X | Process Y | Process Z |
| :--- | ---: | ---: | ---: |
| Transferred to next Process | $60 \%$ | $50 \%$ |  |
| Transferred to warehouse for sale | $40 \%$ | $50 \%$ | $100 \%$ |

In each process, there is a weight loss of $2 \%$ and scrap of $4 \%$ of input of each process. The realizable value of scrap of each process is as below:

Process X @ ₹ 3 per ton
Process Y @ ₹ 5 per ton
Process Z @ ₹ 7 per ton.
The following particulars relate to January 2023:

|  | Process X | Process Y | Process Z |
| :--- | ---: | ---: | ---: |
| Materials used (in Tons) | 1,500 | 454 | 189 |
| Rate per ton | $₹ 21.5$ | $₹ 14$ | $₹ 12$ |
| Direct Wages | ₹ 5,000 | ₹ 3,260 | ₹ 2,540 |
| Direct Expenses | ₹ 3,820 | ₹ 2,775 | ₹ 1,900 |

PREPARE Process Accounts- $\mathrm{X}, \mathrm{Y}$ and Z \& calculate cost per ton at each process. (10 Marks)
(b) Ultra Builders Ltd. has started a contract on 1st April 2021. The Trial balance as on 31st March 2022 showed the following balances:

| Particulars | Dr. (₹) | Cr. (₹) |
| :--- | ---: | ---: |
| Paid up share capital |  | $2,05,75,000$ |
| Land and buildings | $50,60,000$ |  |
| Machinery at cost (85\% at site) | $39,60,000$ |  |
| Cash and bank | 33,000 |  |
| Materials at cost | $27,78,600$ |  |
| Creditors for materials |  | $11,33,660$ |
| Direct wages | $14,60,800$ |  |


| Site expenses | $10,56,000$ |  |
| :--- | ---: | ---: |
| Vehicles | $40,00,000$ |  |
| Furniture | $7,00,000$ |  |
| Office equipment | $12,00,000$ |  |
| Postage and Stationery | 32,560 |  |
| Office expenses | $6,88,600$ |  |
| Rates and taxes | 28,160 |  |
| Fuel and power | $9,30,600$ |  |
| Outstanding wages |  | $2,21,200$ |
| Advance rates and taxes | 1,540 |  |
|  | $2,19,29,860$ | $2,19,29,860$ |

The contract price is ₹ $2,00,00,000$ and work certified is $₹ 80,00,000$. The cost of work uncertified is ₹ $9,60,000$. Machinery costing ₹ $1,60,000$ was returned to stores at the end of the year. Stock of material at site on 31st March 2022 was of the value of ₹ 40,000 . Depreciation on Machinery, Vehicles and furniture are $10 \%, 15 \%$ and $10 \%$ respectively. You are required to calculate the profit from the contract.
(10 Marks)
5. (a) Bopanna Ltd. produces three products $\mathrm{Zm}, \mathrm{Rm}$ and Pm using the same plant and resources. It has given the following information for the year ended on 31st March 2022:

|  | Zm | Rm | Pm |
| :--- | :---: | :---: | :---: |
| Production Quantity (units) | 6000 | 7200 | 9840 |
| Cost per unit: |  |  |  |
| Direct Material (₹) | 450 | 420 | 880 |
| Direct Labour (₹) | 80 | 150 | 200 |

Budgeted direct labour rate was ₹ 40 per hour and the production overheads, shown in table below, were absorbed to products using direct labour hour rate.
Company followed Absorption Costing Method. However, the company is now considering adopting Activity Based Costing Method.

|  | Budgeted <br> Overheads (₹) | Cost Driver | Remarks |
| :--- | :---: | :---: | :--- |
| Material Procurement | $2,50,000$ | No. of orders | No. of orders was 30 units <br> for each product. |
| Set-up | $1,50,000$ | No. of production <br> Runs | All the three products are <br> produced in production <br> runs of 50 units. |
| Quality Control | $1,00,000$ | No. of <br> Inspections | Done for each production <br> run. |
| Maintenance | $3,00,000$ | Maintenance <br> hours | Total maintenance hours <br> were 10,000 and was <br> allocated in the ratio of <br> $2: 1: 2$ between X, Y \& Z. |

Required:
(i) CALCULATE the total cost per unit of each product using the Absorption Costing Method.
(ii) CALCULATE the total cost per unit of each product using the Activity Based Costing Method.
(10 Marks)
(b) Nero Chemicals Ltd. operates a simple chemical process to convert material RV into three separate items, such as $T, U$ and $V$. All three end products are separated simultaneously at a single split-off point, at which time Product $T$ and Product $U$ are ready for sale without additional costs. Product V , however, is processed further before being sold. There is no available market price for V at the split-off point.

The selling prices quoted here are expected to remain the same in the coming year.
During 2021-22, the selling prices of the items and the total units sold were:
T-1,000 tons sold for ₹ 6,000 per ton
U-2500 tons sold for ₹ 5,000 per ton
V - 3000 tons sold for ₹ 6,500 per ton
The total joint manufacturing costs for the year were $₹ 62,50,000$. An additional $₹ 9,00,000$ was spent to finish product V .
There were no opening inventories of $\mathrm{T}, \mathrm{U}$ or V at the end of the year. The following inventories of complete units were on hand.
T-900 tons
U - 300 Tons
V-125 tons
There was no opening or closing work-in-progress.
Required:
COMPUTE the cost of inventories of $\mathrm{T}, \mathrm{U}$ and V and cost of goods sold for year ended March 31,2022, using Net realizable value (NRV) method of joint cost allocation.
(10 Marks)
6. Answer any four of the following:
(a) STATE the advantages of Zero-based budgeting.
(b) DIFFERENTIATE between Cost Accounting and Management Accounting.
(c) "Is reconciliation of cost accounts and financial accounts necessary in case of integrated accounting system?" EXPLAIN.
(d) DEFINE cost units? WRITE the cost unit basis against each of the following Industry/ProductAutomobile, Steel, Cement, Chemicals, Power and Transport.
(e) DISTINGUISH clearly between Bin cards and Stores Ledger.

