## MOCK TEST PAPER-1

## INTERMEDIATE (NEW): 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) A company gives the following information:

| Margin of Safety | Rs. $7,50,000$ |
| :--- | ---: |
| Total Cost | Rs. $7,75,000$ |
| Margin of Safety (Qty.) | 15,000 units |
| Break Even Sales in Units | 5,000 units |

You are required to CALCULATE:
(i) Selling price per unit
(ii) Profit
(iii) Profit/ Volume Ratio
(iv) Break Even Sales (in Rupees)
(v) Fixed Cost
(b) ZX Ltd. has furnished the following information:

|  | Budgeted | Actual March 2020 |
| :--- | ---: | ---: |
| Number of working days | 25 | 27 |
| Production (in units) | 20,000 | 22,000 |
| Fixed Overheads | Rs. $3,00,000$ | Rs. $3,10,000$ |

Budgeted fixed overhead rate is Rs. 10.00 per hour. In March 2020, the actual hours worked were 31,500 . In relation to fixed overheads, CALCULATE:
(i) Efficiency Variance
(ii) Capacity Variance
(iii) Calendar Variance
(iv) Volume Variance
(v) Expenditure Variance
(c) A company is undecided as to what kind of wage scheme should be introduced. The following particulars have been compiled in respect of three workers, which are under consideration of the management.

|  | I | II | III |
| :--- | ---: | ---: | ---: |
| Actual hours worked | 380 | 100 | 540 |
| Hourly rate of wages (in Rs.) | 40 | 50 | 60 |
| Productions in units: |  |  |  |
| - Product A | 210 | - | 600 |
| $-\quad$ Product B | 360 | - | 1350 |
| $-\quad$ Product C | 460 | 250 | - |
| Standard time allowed per unit of each product is: |  |  |  |
|  | A | B | C |
| Minutes | 15 | 20 | 30 |

For the purpose of piece rate, each minute is valued at Rs. 1/-
You are required to COMPUTE the wages of each worker under:
(i) Guaranteed hourly rate basis.
(ii) Piece work earning basis, but guaranteed at $75 \%$ of basic pay (Guaranteed hourly rate if his earnings are less than $50 \%$ of basic pay.)
(iii) Premium bonus basis where the worker received bonus based on Rowan scheme.
(d) A Ltd has calculated a predetermined overhead rate of Rs. 22 per machine hour for its Quality Check (QC) department. This rate has been calculated for the budgeted level of activity and is considered as appropriate for absorbing overheads. The following overhead expenditures at various activity levels had been estimated.

| Total overheads | Number of machine hours |
| :---: | :---: |
| Rs. $3,38,875$ | 14,500 |
| Rs. $3,47,625$ | 15,500 |
| Rs. $3,56,375$ | 16,500 |

You are required to:
(i) CALCULATE the variable overhead absorption rate per machine hour.
(ii) CALCULATE the estimated total fixed overheads.
(iii) CALCULATE the budgeted level of activity in machine hours.
(iv) CALCULATE the amount of under/over absorption of overheads if the actual machine hours were 14,970 and actual overheads were Rs. $3,22,000$.
(v) ANALYSE the arguments for and against using departmental absorption rates as opposed to a single or blanket factory wide rate.
( $4 \times 5$ Marks $=20$ Marks)
2. (a) ZA Ltd. is a manufacturer of a range of goods. The cost structure of its different products is as follows:

| Particulars | Product | Product | Product |  |
| :--- | :---: | :---: | :---: | :---: |
|  | A | B | C |  |
| Direct Materials | 100 | 80 | 80 | Rs./u |
| Direct Labour @Rs.10/ hour | 30 | 40 | 50 | Rs./u |
| Production Overheads | 30 | 40 | 50 | Rs./u |
| Total Cost | 160 | 160 | 180 | Rs./u |
| Quantity Produced | 20,000 | 40,000 | 60,000 | Units |

ZA Ltd. was absorbing overheads on the basis of direct labour hours. A newly appointed management accountant has suggested that the company should introduce ABC system and has identified cost drivers and cost pools as follows:

| Activity Cost Pool | Cost Driver | Associated Cost (Rs.) |
| :--- | :--- | ---: |
| Stores Receiving | Purchase Requisitions | $5,92,000$ |
| Inspection | Number of Production Runs | $17,88,000$ |
| Dispatch | Orders Executed | $4,20,000$ |
| Machine Setup | Number of Setups | $24,00,000$ |

The following information is also supplied:

| Details | Product A | Product B | Product C |
| :--- | :---: | :---: | :---: |
| No. of Setups | 360 | 390 | 450 |
| No. of Orders Executed | 180 | 270 | 300 |
| No. of Production Runs | 750 | 1,050 | 1,200 |
| No. of Purchase Requisitions | 300 | 450 | 500 |

## Required:

CALCULATE activity based production cost of all the three products.
(b) Following figures has been extracted from the books of $\mathrm{M} / \mathrm{s}$ A\&R Brothers:

|  | Amount (Rs.) |
| :--- | ---: |
| Stock on 1st March, 2020 |  |
| - Raw materials | $6,06,000$ |
| - Finished goods | $3,59,000$ |
| Stock on 31st March, 2020 |  |
| - Raw materials | $7,50,000$ |
| - Finished goods | $3,09,000$ |
| Work-in-process: | $12,56,000$ |
| - On 1st March, 2020 | $14,22,000$ |
| - On 31st March, 2020 | $28,57,000$ |
| Purchase of raw materials | $1,34,00,000$ |
| Sale of finished goods | $37,50,000$ |
| Direct wages | $21,25,000$ |
| Factory expenses | $10,34,000$ |
| Office and administration expenses | $7,50,000$ |
| Selling and distribution expenses | 26,000 |
| Sale of scrap |  |

You are required to COMPUTE:
(i) Value of material consumed
(ii) Prime cost
(iii) Cost of production
(iv) Cost of goods sold
(v) Cost of sales
(vi) Profit/ loss
3. (a) A company manufactures a product from a raw material, which is purchased at Rs. 180 per kg . The company incurs a handling cost of Rs. 1,460 plus freight of Rs. 940 per order. The incremental carrying cost of inventory of raw material is Rs. 2.5 per kg per month. In addition, the cost of working capital finance on the investment in inventory of raw material is Rs.18per kg per annum. The annual production of the product is $1,00,000$ units and 2.5 units are obtained from one kg . of raw material.

## Required:

(i) CALCULATE the economic order quantity of raw materials.
(ii) DETERMINE, how frequently company should order for procurement be placed.
(iii) If the company proposes to rationalize placement of orders on quarterly basis, DETERMINE the percentage of discount in the price of raw materials should be negotiated?
Assume 360 days in a year.
(b) G K Ltd. produces a product "XYZ" which passes through two processes, viz. Process-A and Process-B. The details for the year ending $31{ }^{\text {st }}$ March, 2020 are as follows:

|  | Process A | Process - B |
| :--- | ---: | ---: |
| 40,000 units introduced at a cost of | Rs. $3,60,000$ | - |
| Material consumed | Rs. $2,42,000$ | $2,25,000$ |
| Direct wages | Rs. $2,58,000$ | $1,90,000$ |
| Manufacturing expenses | Rs. $1,96,000$ | $1,23,720$ |
| Output in units | 37,000 | 27,000 |
| Normal wastage of inputs | $5 \%$ | $10 \%$ |
| Scrap value (per unit) | Rs. 15 | 20 |
| Selling price (per unit) | Rs. 37 | 61 |

## Additional Information:

(a) $80 \%$ of the output of Process-A, was passed on to the next process and the balance was sold. The entire output of Process- $B$ was sold.
(b) Indirect expenses for the year was Rs. $4,48,080$.
(c) It is assumed that Process-A and Process-B are not responsibility centre.

## Required:

(i) PREPARE Process-A and Process-B Account.
(ii) PREPARE Costing Profit \& Loss Account showing the net profit/ net loss for the year.
(10 Marks)
4. (a) The Trading and Profit and Loss Account of a company for the year ended $31-03-2020$ is as under:

Trading and Profit and Loss Account

| Particulars | Rs. | Particulars | Rs. |
| :--- | ---: | :--- | ---: |
| To Materials | $26,80,000$ | By Sales (50,000 units) | $62,00,000$ |
| To Wages | $17,80,000$ | By Closing stock (2,000 units) | $1,50,000$ |
| To Factory expenses | $9,50,000$ | By Dividend received | 80,000 |


| To General administrative expenses | $4,80,200$ |
| :--- | ---: |
| To Selling Expenses | $2,50,000$ |
| To Preliminary expenses written off | 70,000 |
| To Net profit | $2,19,800$ |
|  | $64,30,000$ |
|  |  |

In the Cost Accounts:
(i) Factory expenses have been allocated to production at 20\% of Prime Cost.
(ii) General administrative expenses absorbed at $10 \%$ of factory cost.
(iii) Selling expenses charged at Rs. 10 per unit sold.

## Required:

PREPARE the Costing Profit and Loss Account of the company and RECONCILE the Profit/Loss with the profit as shown in the Financial Accounts.
(10 Marks)
(b) During the FY 2019-20, GP Limited has produced 30,000 units operating at $50 \%$ capacity level. The cost structure at the $50 \%$ level of activity is as under:

| Particulars | Rs. |
| :--- | ---: |
| Direct Material | 150 per unit |
| Direct Wages | 50 per unit |
| Variable Overheads | 50 per unit |
| Direct Expenses | 30 per unit |
| Factory Expenses (25\% fixed) | 40 per unit |
| Selling and Distribution Exp. (80\% variable) | 20 per unit |
| Office and Administrative Exp. (100\% fixed) | 10 per unit |

The company anticipates that in FY 2020-21, the variable costs will go up by $10 \%$ and fixed costs will go up by $15 \%$.

The selling price per unit will remain unchanged at Rs. 400 .
Required:
(i) CALCULATE the budgeted profit/ loss for the FY 2019-20.
(ii) PREPARE an Expense budget on marginal cost basis for the FY 2020-21 for the company at $50 \%$ and $60 \%$ level of activity and FIND OUT the profits at respective levels. ( 10 Marks)
5. (a) KR Resorts (P) Ltd. offers three types of rooms to its guests, viz deluxe room, super deluxe room and luxury suite. You are required to DETERMINE the tariff to be charged to the customers for different types of rooms on the basis of following information:

| Types of Room | Number of Rooms | Occupancy |
| :--- | ---: | ---: |
| Deluxe Room | 100 | $90 \%$ |
| Super Deluxe Room | 60 | $75 \%$ |
| Luxury Suite | 40 | $60 \%$ |

Rent of 'super deluxe' room is to be fixed at 2 times of 'deluxe room' and that of 'luxury suite' is 3 times of 'deluxe room'. Annual expenses are as follows:

| Particulars | Amount (Rs. lakhs) |
| :--- | ---: |
| Staff salaries | 780.00 |
| Lighting, Heating and Power | 350.00 |
| Repairs, Maintenance and Renovation | 220.00 |
| Linen | 60.00 |
| Laundry charges | 34.00 |
| Interior decoration | 85.00 |
| Sundries | 36.28 |

An attendant for each room was provided when the room was occupied and he was paid Rs. 500 per day towards wages. Further, depreciation is to be provided on building @ $5 \%$ on Rs. 900 lakhs, furniture and fixtures @ $10 \%$ on Rs. 90 lakhs and air conditioners @ $10 \%$ on Rs. 75 lakhs.
Profit is to be provided @ $25 \%$ on total taking and assume 360 days in a year.
(10 Marks)
(b) (i) SHOW Journal entries for the following transactions assuming cost and financial accounts are integrated:
(1) Materials issued:

Direct Rs. 6,50,000
Indirect (to factory)
Rs. 2,30,000
(2) Allocation of wages ( $25 \%$ indirect)

Rs. 9,00,000
(3) Under/Over absorbed overheads:

Factory (Over)
Rs. 60,000
Administration (Under)
Rs. 50,000
(4) Payment to Creditors (Trade payables)

Rs. 9,00,000
(5) Collection from Debtors (Trade receivables)

Rs. $8,00,000$
(ii) A company can make any one of the 3 products $\mathrm{X}, \mathrm{Y}$ or Z in a year. It can exercise its option only at the beginning of each year.
Relevant information about the products for the next year is given below.

|  |  |  |  |
| :--- | :---: | :---: | :---: |
|  | X | Y | Z |
| Selling Price (Rs. / unit) | 100 | 120 | 120 |
| Variable Costs (Rs. / unit) | 60 | 90 | 70 |
| Market Demand (unit) | 3,000 | 2,000 | 1,000 |
| Production Capacity (unit) | 2,000 | 3,000 | 900 |
| Fixed Costs (Rs.) | $3,00,000$ |  |  |

## Required

COMPUTE the opportunity costs for each of the products.
6. (a) DISCUSS the accounting treatment of Idle time and overtime wages.
(b) EXPLAIN the stages in Zero-based budgeting.
(c) STATE the differences between Job costing and Batch costing.
(d) EXPLAIN the treatment of by-product cost in cost accounting.

