

**MOCK TEST PAPER – I**  
**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 factory produces two products, 'Ghee' and 'Cream' from a single process. The joint processing costs during a particular month are:

Direct Material	₹ 60,000
Direct Labour	₹ 19,200
Variable Overheads	₹ 24,000
Fixed Overheads	₹ 64,000

Sales: Ghee - 200 litre @ ₹ 600 per litre; Cream – 240 litre @ ₹ 200 per litre.

REQUIRED:

- I. Apportion joints costs on the basis of:
- Physical Quantity of each product.
  - Contribution Margin method, and
- II. Determine Profit or Loss under both the methods.
- (b) Zee Ltd. manufactures pistons used in car engines. As per the study conducted by the Auto Parts Manufacturers Association, there will be a demand of 80 million pistons in the coming year. A Ltd. is expected to have a market share of 2.15% of the total market demand of the pistons in the coming year. It is estimated that it costs ₹ 2.50 as inventory holding cost per piston per month and that the set-up cost per run of piston manufacture is ₹ 4,500.
- COMPUTE the optimum run size for piston manufacturing?
  - Assuming that the company has a policy of manufacturing 20,000 pistons per run, CALCULATE how much extra costs the company would be incurring as compared to the optimum run suggested in (i) above?
- (c) A machine costing ₹ 10 lakhs, was purchased on 01-04-2021. The expected life of the machine is 10 years. At the end of this period its scrap value is likely to be ₹ 10,000. The total cost of all the machines including new one was ₹ 90 lakhs.
- The other information is given as follows:
- Working hours of the machine for the year was 4,200 including 200 non-productive hours.
  - Repairs and maintenance for the new machine during the year was ₹ 6,000.
  - Insurance Premium was paid for all the machine ₹ 9,000.
  - New machine consumes 8 units of electricity per hour, the rate per unit being ₹ 3.75

(v) The new machine occupies 1/10<sup>th</sup> area of the department. Rent of the department is ₹ 2,400 per month.

(vi) Depreciation is charged on straight line basis.

COMPUTE machine hour rate for the new machine.

- (d) From the following particulars, COMPUTE Notional profit and estimated profit on a contract (which has been 80% complete):

	(₹)
Total expenditure to date	4,00,000
Estimated further expenditure to complete the contract (including contingencies)	22,000
Contract price	5,44,000
Work certified	4,89,600
Work uncertified	30,200
Cash received	3,91,680

**(5 Marks × 4 = 20 Marks)**

2. (a) The yearly production of a company's product which has a steady market is 40,000 units. Each unit of a product requires 1 kg. of raw material. The cost of placing one order for raw material is ₹ 1,000 and the inventory carrying cost is ₹ 20 per annum. The lead time for procurement of raw material is 36 days and a safety stock of 1,000 kg. of raw materials is maintained by the company. The company has been able to negotiate the following discount structure with the raw material supplier:

Order quantity (kg.)	Discount (₹)
Upto 6,000	NIL
6,001 – 8,000	4,000
8,001 – 16,000	20,000
16,001 – 30,000	32,000
30,001 – 45,000	4,0000

You are REQUIRED to:

- (i) Calculate the re-order point considering 30 days in a month.
- (ii) Prepare a statement showing the total cost of procurement and storage of raw material after considering the discount of the company elects to place one, two, four or five orders in the year.
- (iii) State the number of orders which the company should place to minimize the costs after taking EOQ also into consideration. **(10 Marks)**

- (b) Breeze Ltd has decided to analyse the profitability of its five new customers. It buys soft drink bottles in cases at ₹ 54 per case and sells them to retail customers at a list price of ₹ 64.80 per case. The data pertaining to five customers are given below:

Particulars	Customers				
	Aey	Bee	Cee	Dee	Eey
Number of Cases Sold	9,360	14,200	62,000	38,000	9,800
List Selling Price (₹)	64.80	64.80	64.80	64.80	64.80
Actual Selling Price (₹)	64.80	64.08	58.80	60.24	58.32

Number of Purchase Orders	30	50	60	50	60
Number of Customers visits	4	6	12	4	6
Number of Deliveries	20	60	120	80	40
Kilometers travelled per delivery	40	12	10	20	60
Number of expediate Deliveries	0	0	0	0	2

Its five activities and their cost drivers are:

Activity	Cost Driver
Order taking	₹ 240 per purchase order
Customer visits	₹ 360 per each visit
Deliveries	₹ 4.80 per delivery km travelled
Product Handling	₹ 2.40 per case sold
Expedited deliveries	₹ 120 per such delivery

You are REQUIRED to :

- (i) Compute the customer level operating income of each of five retail customers by using the Cost Driver rates.
  - (ii) Examine the results to give your comments on Customer 'Dee' in comparison with Customer 'Cee' and on Customer 'Eey' in comparison with Customer 'Aey'. **(10 Marks)**
3. (a) Navyug Ltd. manufactures chemical solutions for the food processing industry. The manufacturing takes place in a number of processes and the company uses a FIFO process costing system to value work-in-process and finished goods. At the end of the last month, a fire occurred in the factory and destroyed some of the paper files containing records of the process operations for the month.

Navyug Ltd. needs your help to prepare the process accounts for the month during which the fire occurred. You have been able to gather some information about the month's operating activities but some of the information could not be retrieved due to the damage. The following information was salvaged:

- Opening work-in-process at the beginning of the month was 900 litres, 70% complete for labour and 60% complete for overheads. Opening work-in-process was valued at ₹ 29,970.
- Closing work-in-process at the end of the month was 160 litres, 30% complete for labour and 20% complete for overheads.
- Normal loss is 10% of input and total losses during the month were 1,800 litres partly due to the fire damage.
- Output sent to finished goods warehouse was 4,200 litres.
- Losses have a scrap value of ₹ 20 per litre.
- All raw materials are added at the commencement of the process.
- The cost per equivalent unit (litre) is ₹39 for the month made up as follows:

	(₹)
Raw Material	23
Labour	7
Overheads	9
	39

REQUIRED:

- (i) Calculate the quantity (in litres) of raw material inputs during the month.
  - (ii) Calculate the quantity (in litres) of normal loss expected from the process and the quantity (in litres) of abnormal loss / gain experienced in the month.
  - (iii) Calculate the values of raw material, labour and overheads added to the process during the month.
  - (iv) Prepare the process account for the month. **(10 Marks)**
- (b) Xim Ltd. manufactures two types of boxes 'Super' and 'Normal'. The cost data for the year ended 31<sup>st</sup> March, 2021 is as follows:

	(₹)
Direct Materials	12,00,000
Direct Wages	6,72,000
Production Overhead	2,88,000
<b>Total</b>	<b>21,60,000</b>

There was no work-in-progress at the beginning or at the end of year. It is further ascertained that:

1. Direct materials cost per unit in 'Super' was twice as much of direct material in 'Normal'.
2. 2% cash discount was received for payment made within 30 days to the creditors of Direct materials.
3. Direct wages per unit for 'Normal' were 60% of those of 'Super'.
4. Production overhead per unit was at same rate for both the types of boxes.
5. Administration overhead was 200% of direct labour for each type.
6. Selling cost was ₹ 1 per 'Super' type.
7. Production and sales during the year were as follows:

Production		Sales	
Type	No. of units	Type	No. of units
Super	60,000	Super	54,000
Normal	1,80,000		

8. Selling price was ₹ 30 per unit for 'Super'.
9. Company was also involved in a copyright infringement case related to the manufacturing process of 'Super' production. As per the verdict, it had to pay penalty of ₹ 50,000.

PREPARE Cost Sheet of Xim Ltd. for 'Super' showing:

- (i) Cost per unit and Total Cost
  - (ii) Profit per unit and Total Profit **(10 Marks)**
4. (a) A hotel is being run in a Hill station with 200 single rooms. The hotel offers concessional rates during six off-season (winter) months in a year.

During this period, half of the full room rent is charged. The management's profit margin is targeted at 20% of the room rent. The following are the cost estimates and other details for the year ending 31<sup>st</sup> March, 2021:

- (i) Occupancy during the season is 80% while in the off-season it is 40%.

- (ii) Total investment in the hotel is ₹ 300 lakhs of which 80% relates to Buildings and the balance to Furniture and other Equipment.
- (iii) Room attendants are paid ₹ 15 per room per day on the basis of occupancy of rooms in a month.
- (iv) Expenses :
- Staff salary (excluding that of room attendants) ₹ 8,00,000
  - Repairs to Buildings ₹ 3,00,000
  - Laundry Charges ₹ 1,40,000
  - Interior Charges ₹ 2,50,000
  - Miscellaneous Expenses ₹ 2,00,200
- (v) Annual Depreciation is to be provided on Buildings @ 5% and 15% on Furniture and other Equipments on straight line method.
- (vi) Monthly lighting charges are ₹ 110 per room, except in four months in winter when it is ₹ 30 per room and this cost is on the basis of full occupancy for a month.

You are REQUIRED to workout the room rent chargeable per day both during the season and the off-season months using the foregoing information.

(Assume a month to be of 30 days and winter season to be considered as part of off-season).

**(10 Marks)**

- (b) ABC Ltd. has its factory at two locations viz Noida and Patparganj. Rowan plan is used at Noida factory and Halsey plan at Patparganj factory.

Standard time and basic rate of wages are same for a job which is similar and is carried out on similar machinery. Normal working hours is 9 hours per day in a 5 day week.

Job at Noida factory is completed in 36 hours while at Patparganj factory it has taken 33 hours 45 minutes. Conversion costs at Noida and Patparganj are ₹ 6,084 and ₹ 5,569 respectively. Overheads account for ₹ 25 per hour.

REQUIRED:

- (i) To find out the normal wage; and
- (ii) To compare the respective conversion costs.

**(10 Marks)**

5. (a) Amy Ltd. manufacture and sales its product RM. The following figures have been collected from cost records of last year for the product RM:

Elements of Cost	Variable Cost portion	Fixed Cost
Direct Material	30% of Cost of Goods Sold	--
Direct Labour	15% of Cost of Goods Sold	--
Factory Overhead	10% of Cost of Goods Sold	₹ 3,45,000
Administration Overhead	2% of Cost of Goods Sold	₹ 1,06,500
Selling & Distribution Overhead	4% of Cost of Sales	₹ 1,02,000

Last Year, 7,500 units were sold at ₹ 185 per unit. From the given information, DETERMINE the followings:

- (i) Break-even Sales (in rupees)
- (ii) Profit earned during last year

(iii) Margin of safety (in %)

(iv) Profit if the sales were 10% less than the actual sales.

(Assume that Administration Overhead is related with production activity)

**(10 Marks)**

(b) Following information has been provided by a company:

Number of units produced and sold	9,000
Standard labour rate per hour	₹ 12
Standard hours required for 9,000 units	-
Actual hours required	25,641 hours
Labour efficiency	105.3%
Labour rate variance	₹ 1,53,846 (A)

You are required to CALCULATE:

(i) Actual labour rate per hour

(ii) Standard hours required for 9,000 units

(iii) Labour Efficiency variance

(iv) Standard labour cost per unit

(v) Actual labour cost per unit.

**(10 Marks)**

6. (a) JOURNALISE the following transactions in cost books under Non-Integrated system of Accounting.

(i) Credit Purchase of Material	₹ 27,000
(ii) Manufacturing overhead charged to Production	₹ 6,000
(iii) Selling and Distribution overheads recovered from Sales	₹ 4,000
(iv) Indirect wages incurred for Manufacturing department	₹ 8,000
(v) Material returned from production to stores	₹ 9,000

(b) EXPLAIN the difference between Cost Accounting and Management Accounting

(c) DEFINE Zero Based Budgeting and mention its various stages.

(d) HOW do you deal with the following in cost accounts?

(i) Fringe benefits

(ii) Bad debts.

**(4 × 5 =20 Marks)**