

**MOCK TEST PAPER –2**  
**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) A factory producing article A also produces a by-product B which is further processed into finished product. The joint cost of manufacture is given below:

Material	₹ 5,000
Labour	₹ 3,000
Overhead	<u>₹ 2,000</u>
	<u>₹ 10,000</u>

Subsequent cost in ₹ are given below:

	A	B
Material	3,000	1,500
Labour	1,400	1,000
Overhead	600	500
	5,000	3,000

Selling prices are

A	₹	16,000
B	₹	8,000

Estimated profit on selling prices is 25% for A and 20% for B.

Assume that selling and distribution expenses are in proportion of sales prices. Show how you would apportion joint costs of manufacture and prepare a statement showing cost of production of A and B.

- (b) T Ltd., produces and sells 95,000 units of 'X' in a year at its 80% production capacity. The selling price of product is ₹ 8 per unit. The variable cost is 75% of sales price per unit. The fixed cost is ₹ 3,50,000. The company is continuously incurring losses and management plans to shut-down the plant. The fixed cost is expected to be reduced to ₹ 1,30,000. Additional costs of plant shut-down are expected at ₹ 15,000.

Should the plant be shut-down? Find the shut-down point in units and also in percentage of capacity level of production.

- (c) P Limited produces product 'P'. It uses annually 60,000 units of a material 'Rex' costing ₹ 10 per unit. Other relevant information are:

Cost of placing an order : ₹ 800 per order

Carrying cost	:	15% per annum of average inventory
Re-order period	:	10 days
Safety stock	:	600 units

The company operates 300 days in a year.

You are required to calculate:

- (i) Economic Order Quantity for material 'Rex'.
  - (ii) Re-order Level.
  - (iii) Maximum Stock Level.
  - (iv) Average Stock Level.
- (d) The rate of change of labour force in a company during the year ending 31st March, 2023 was calculated as 13%, 8% and 5% respectively under 'Flux Method', 'Replacement method' and 'Separation method'. The number of workers separated during the year is 40.

You are required to calculate:

- (i) Average number of workers on roll.
- (ii) Number of workers replaced during the year.
- (iii) Number of new accessions i.e. new recruitment.
- (iv) Number of workers at the beginning of the year. **(4 × 5 Marks = 20 Marks)**

2. (a) HP bank offers three products, viz., deposits, Loans and Credit Cards. The bank has selected 4 activities for a detailed budgeting exercise, following activity-based costing methods.

The bank wants to know the product wise total cost per unit for the selected activities, so that prices may be fixed accordingly.

The following information is made available to formulate the budget:

Activity	Present Cost (₹)	Estimation for the budget period
ATM Services:		
Machine Maintenance	4,00,000	All fixed, no change.
Rents	2,00,000	Fully fixed, no change.
Currency Replenishment Cost	1,00,000	Expected to double during budget period.
	7,00,000	(This activity is driven by no. of ATM transactions)
Computer Processing	5,00,000	Half this amount is fixed and no change is expected. The variable portion is expected to increase to three times the current level. (This activity is driven by the number of computer transactions)
Issuing Statements	18,00,000	Presently, 3 lakh statements are made. In the budget period, 5 lakh statements are expected. For every increase of one lakh statement, one lakh rupees is the budgeted increase. (This activity is driven by the number of statements)

Computer Inquiries	2,00,000	Estimated to increase by 80% during the budget period. (This activity is driven by telephone minutes)
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The activity drivers and their budgeted quantities are given below:

Activity Drivers	Deposits	Loans	Credit Cards
No. of ATM Transactions	1,50,000	---	50,000
No. of Computer Processing Transactions	15,00,000	2,00,000	3,00,000
No. of Statements to be issued	3,50,000	50,000	1,00,000
Telephone Minutes	3,60,000	1,80,000	1,80,000

The bank budgets a volume of 58,600 deposit accounts, 13,000 loan accounts, and 14,000 Credit Card Accounts.

Required:

- Calculate the budgeted rate for each activity.
- Prepare the budgeted cost statement activity wise.
- Compute the budgeted product cost per account for each product using (i) and (ii) above.

**(10 Marks)**

- (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<sup>st</sup> March, 2023 are as follows:

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

**Additional Information:**

- 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.
- Indirect expenses for the year were ₹ 4,48,080.
- It is assumed that Process-A and Process-B are not responsibility centre.

Required:

- Prepare Process-A and Process-B Account.
- Prepare Costing Profit & Loss Account showing the net profit I net loss for the year.

**(10 Marks)**

3. (a) Following figures has been extracted from the books of M/s A&R Brothers:

	Amount (₹)
Stock on 1 <sup>st</sup> March, 2023	
- Raw materials	6,06,000
- Finished goods	3,59,000
Stock on 31 <sup>st</sup> March, 2023	
- Raw materials	7,50,000
- Finished goods	3,09,000
Work-in-process:	
- On 1 <sup>st</sup> March, 2023	12,56,000
- On 31 <sup>st</sup> March, 2023	14,22,000
Purchase of raw materials	28,57,000
Sale of finished goods	1,34,00,000
Direct wages	37,50,000
Factory expenses	21,25,000
Office and administration expenses	10,34,000
Selling and distribution expenses	7,50,000
Sale of scrap	26,000

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 **(10 Marks)**
- (b) ABC Hospital runs a Critical Care Unit (CCU) in a hired building. CCU consists of 35 beds and 5 more beds can be added, if required.

Rent per month - ₹ 75,000

Supervisors – 2 persons – ₹ 25,000 per month – each

Nurses – 4 persons – ₹ 20,000 per month – each

Ward Boys – 4 persons – ₹ 5,000 per month – each

Doctors paid ₹ 2,50,000 per month – paid on the basis of number of patients attended and the time spent by them

**Other expenses for the year are as follows:**

Repairs (Fixed) – ₹ 81,000

Food to Patients (Variable) – ₹ 8,80,000

Other services to patients (Variable) – ₹ 3,00,000

Laundry charges (Variable) – ₹ 6,00,000

Medicines (Variable) – ₹ 7,50,000

Other fixed expenses – ₹ 10,80,000

Administration expenses allocated – ₹ 10,00,000

It was estimated that for 150 days in a year 35 beds are occupied and for 80 days only 25 beds are occupied.

The hospital hired 750 beds at a charge of ₹ 100 per bed per day, to accommodate the flow of patients. However, this does not exceed more than 5 extra beds over and above the normal capacity of 35 beds on any day.

You are required to –

- (i) Calculate profit per patient day, if the hospital recovers on an average ₹ 2,000 per day from each patient.
- (ii) Find out breakeven point for the hospital. **(10 Marks)**

4. (a) X Associates undertake to prepare income tax returns for individuals for a fee. They use the weighted average method and actual costs for the financial reporting purposes. However, for internal reporting, they use a standard costs system. The standards, based on equivalent performance, have been established as follows:

Labour per return                      5 hrs @ ₹ 40 per hour

Overhead per return                    5 hrs @ ₹ 20 per hour

For July 2023 performance, budgeted overhead is ₹98,000 for standard labour hours allowed.

The following additional information pertains to the month of July 2023:

July 1	Return-in-process (25% complete)	200 No.
	Return started in July	825 Nos
July 31	Return-in-process (80% complete)	125 Nos
Cost Data:		
July 1	Return-in-process labour	₹ 12,000
	- Overheads	₹ 5,000
July 1 to 31	Labour : 4,000 hours	₹ 1,78,000
	Overheads	₹ 90,000

You are required to compute:

- (i) For each element, equivalent units of performance and the actual cost per equivalent unit.
  - (ii) Actual cost of return-in-process on July 31.
  - (iii) The standard cost per return.
  - (iv) The labour rate and labour efficiency variance as well as overhead volume and overhead expenditure variance. **(10 Marks)**
- (b) In an engineering company, the factory overheads are recovered on a fixed percentage basis on direct wages and the administrative overheads are absorbed on a fixed percentage basis on factory cost.

The company has furnished the following data relating to two jobs undertaken by it in a period:

	Job 101	Job 102
	(₹)	(₹)
Direct materials	54,000	37,500
Direct wages	42,000	30,000

Selling price	1,66,650	1,28,250
Profit percentage on Total Cost	10%	20%

Required:

- Computation of percentage recovery rates of factory overheads and administrative overheads.
- Calculation of the amount of factory overheads, administrative overheads and profit for each of the two jobs.
- Using the above recovery rates determine the selling price of job 103. The additional data being:

Direct materials	₹ 24,000
Direct wages	₹ 20,000
Profit percentage on selling price	12-½%

**(10 Marks)**

5. (a) N Ltd., a vehicle manufacturer, has prepared sales budget for the next few months, and the following draft figures are available:

Month	No. of vehicles
October	40,000
November	35,000
December	45,000
January	60,000
February	65,000

To manufacture a vehicle a standard cost of ₹5,71,400 is incurred and sold through dealers at a uniform selling price of ₹8,57,100 to customers. Dealers are paid 15% commission on selling price on sale of a vehicle.

Apart from other materials four units of Part - X are required to manufacture a vehicle. It is a policy of the company to hold stocks of Part-X at the end of each month to cover 40% of next month's production. 48,000 units of Part-X are in stock as on 1<sup>st</sup> October.

There are 9,500 nos. of completed vehicles are in stock as on 1<sup>st</sup> October and it is policy to have stocks at the end of each month to cover 20% of the next month's sales.

You are required to -

- Prepare Production budget (in nos.) for the month of October, November, December and January.
- Prepare a Purchase budget for Part-X (in units) for the months of October, November and December.
- Calculate the budgeted gross profit for the quarter October to December. **(10 Marks)**

- (b) A company manufactures four products. The annual demand for products, selling prices and variable production costs are as follows:

Product	P	Q	R	S
Demand (Units)	1,20,000	1,86,000	1,71,000	99,000
	₹	₹	₹	₹
Selling price/unit	23.88	28.68	55.08	47.88

Direct Material/Unit	10.08	13.20	30.48	24.96
Direct Labour/unit	4.08	4.08	6.72	6.36
Variable overheads/unit	1.44	1.44	2.40	2.16

Other data:

- (i) The variable overheads are absorbed on a machine hour basis at a rate of ₹ 1.20 per machine hour.
- (ii) Fixed overheads total ₹ 46,84,000 per annum.
- (iii) Production capacity available 8,15,000 machine hours per annum.
- (iv) Products P, Q and R can be bought-in at ₹ 21.36 per unit, ₹ 24 per unit and ₹ 48 per unit respectively.

You are required to calculate Best product mix and Profitability statement for the year. **(10 Marks)**

6. (a) State the difference between cost control and cost reduction.
- (b) Explain Standard cost centre and Discretionary cost centre.
- (c) State the difference between job costing and process costing.
- (d) State the advantages and disadvantage of cost- plus contract. **(4 × 5 =20 Marks)**