MODEL TEST PAPER 3

INTERMEDIATE: GROUP – II

PAPER – 4: 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.

Working notes should form part of the answer.

Time Allowed – 3 Hours **Maximum Marks – 100**

1. *The question paper comprises two parts, Part I and Part II.*
2. *Part I comprises Case Scenario based Multiple Choice Questions (MCQs) for 30 marks*
3. *Part II comprises questions which require descriptive type answers for 70 marks.*

PART I – Case Scenario based MCQs

Part I is compulsory.

Write the most appropriate answer to each of the following multiple-choice questions by choosing one of the four options given. All questions are compulsory.

1. The board of the J Ltd. has been appraised by the General Manager (HR) that the employee attrition rate in the company has increased. The following facts has been presented by the GM(HR):

   (1) Training period of the new recruits is 50,000 hours. During this period their productivity is 60% of the experienced workers. Time required by an experienced worker is 10 hours per unit.

   (2) 20% of the output during training period was defective. Cost of rectification of a defective unit was ₹ 25.

   (3) Potential productive hours lost due to delay in recruitment were 1,00,000 hours.

   (4) Selling price per unit is ₹ 180 and P/V ratio is 20%.

   (5) Settlement cost of the workers leaving the organization was ₹ 1,83,480.

   (6) Recruitment cost was ₹ 1,56,340

   (7) Training cost was ₹ 1,13,180

   You being an associate finance to GM(HR), has been asked the following questions:

   (i) How much quantity of output is lost due to labour turnover?

   (a) 10,000 units

   (b) 8,000 units

   (c) 12,000 units

   (d) 12,600 units

(ii) How much loss in the form of contribution, the company incurred due to labour turnover?

(a) ₹ 4,32,000

(b) ₹ 4,20,000

(c) ₹ 4,36,000

(d) ₹ 4,28,000

(iii) What is the cost repairing of defective units?

(a) ₹ 75,000

(b) ₹ 15,000

(c) ₹ 50,000

(d) ₹ 25,000

(iv) Calculate the profit lost by the company due to increased labour turnover.

(a) ₹ 7,50,000

(b) ₹ 15,00,000

(c) ₹ 5,00,000

(d) ₹ 9,00,000

(v) How much quantity of output is lost due to inexperience of the new worker?

(a) 1,000 units

(b) 2,600 units

(c) 2,000 units

(d) 12,600 units **(5 x 2 = 10 Marks)**

2. P Ltd. has gathered cost information from ledgers and other sources for the year ended 31st December 2023. The information are tabulated below:

Sl. No.		Amount (₹)	Amount (₹)
(i)	Raw materials purchased		5,00,00,000
(ii)	Freight inward		9,20,600
(iii)	Wages paid to factory workers		25,20,000
(iv)	Royalty paid for production		1,80,000
(v)	Amount paid for power & fuel		3,50,000
(vi)	Job charges paid to job workers		3,10,000
(vii)	Stores and spares consumed		1,10,000
(viii)	Depreciation on office building		50,000
(ix)	Repairs & Maintenance paid for:		
	- Plant & Machinery	40,000	

	- Sales office building	20,000	60,000
(x)	Insurance premium paid for:		
	- Plant & Machinery	28,200	
	- Factory building	18,800	47,000
(xi)	Expenses paid for quality control check activities		18,000
(xii)	Research & development cost paid for improvement in production process		20,000
(xiii)	Expenses paid for pollution control and engineering & maintenance		36,000
(xiv)	Salary paid to Sales & Marketing mangers		5,60,000
(xv)	Salary paid to General Manager		6,40,000
(xvi)	Packing cost paid for:		
	- Primary packing necessary to maintain quality	46,000	
	- For re-distribution of finished goods	80,000	1,26,000
(xvii)	Fee paid to independent directors		1,20,000
(xviii)	Performance bonus paid to sales staffs		1,20,000
(xix)	Value of stock as on 1st January, 2023:		
	- Raw materials	10,00,000	
	- Work-in-process	8,60,000	
	- Finished goods	12,00,000	30,60,000
(xx)	Value of stock as on 31st December, 2023:		
	- Raw materials	8,40,000	
	- Work-in-process	6,60,000	
	- Finished goods	10,50,000	25,50,000

Amount realized by selling of scrap and waste generated during manufacturing process – ₹ 48,000/-

The board meeting is scheduled to be held in next week and you being an associate to the chief cost controller of the company, has been asked to be prepared with the following figures:

(i) How much is the prime cost of the company?

(a) ₹ 5,10,80,600

(b) ₹ 5,44,40,600

(c) ₹ 5,36,00,600

(d) ₹ 5,19,20,600

(ii) How much is the cost of production?

(a) ₹ 5,49,09,600

(b) ₹ 5,50,59,600

(c) ₹ 5,48,73,600

(d) ₹ 5,50,59,000

(iii) What is the value of cost of goods sold?

(a) ₹ 5,49,09,600

(b) ₹ 5,50,59,600

(c) ₹ 5,48,73,600

(d) ₹ 5,50,59,000

(iv) How much is the factory cost?

(a) ₹ 5,49,09,600

(b) ₹ 5,50,59,600

(c) ₹ 5,48,73,600

(d) ₹ 5,50,59,000

(v) What is the value of cost of sales?

(a) ₹ 5,66,49,600

(b) ₹ 5,50,59,600

(c) ₹ 5,48,73,600

(d) ₹ 5,50,59,000 **(5 x 2 = 10 Marks)**

3. What is 'Variable Overhead Efficiency Variance' based on information given below:

Budgeted production	12,000 units
Budgeted variable overhead	₹ 2,40,000
Standard time for one unit of output	2 hours
Actual production	11,800 units
Actual overhead incurred	₹ 2,44,000
Actual hours worked	23,200 hours

(a) ₹ 4000 (A)

(b) ₹ 6000 (A)

(c) ₹ 2000 (F)

(d) ₹ 4000 (F) **(2 Marks)**

4. A company sells two products, A and B. The sales mix is 4 units of A and 3 units of B. The contribution margins per unit are ₹ 140 for A and ₹ 70 for B. Fixed costs are ₹ 6,16,000 per month. What is Break Even Point for Product B?

(a) 5,600 units

(b) 2,400 units

(c) 3,200 units

(d) 800 units **(2 Marks)**

5. Total passenger km run by APL logistic Ltd. was ₹ 43,80,480 for the year between Delhi and Manesar. The bus made 3 round trips per day. Seating capacity of the bus was 52 passengers and average daily occupancy was 75% and the bus runs on an average 26 days in a month. Calculate the distance between Delhi and Manesar.

(a) 55 km

(b) 720 km

(c) 65 km

(d) 60 km **(2 Marks)**

6.

Purchase price	₹ 10,00,000
Custom duty	₹ 2,00,000
GST	@12% on Purchase price
(input credit available)	
Octroi	₹ 5,000
Carriage inward	₹ 12,000
Demurrage charges	₹ 16,100
Commission on purchase	₹ 10,000
Stock of Raw Material:	
Opening	₹ 1,00,000
Closing	₹ 2,00,000

Raw material consumed will be:

(a) ₹ 11,27,000

(b) ₹ 11,43,100

(c) ₹ 12,63,100

(d) ₹ 12,58,100 **(2 Marks)**

7. In case of joint products, the main objective of accounting of the cost is to apportion the joint costs incurred up to the split off point. For cost apportionment one company has chosen Physical Quantity Method. Three joint products 'A', 'B' and 'C' are produced in the same process. Up to the point of split off the total production of A, B and C is 60,000 kg, out of which 'A' produces 30,000 kg and joint costs are ₹ 3,60,000. Joint costs allocated to product A is -

(a) ₹ 1,20,000

(b) ₹ 60,000

(c) ₹ 1,80,000

(d) ₹ 2,00,000 **(2 Marks)**

PART-II – Descriptive Questions (70 Marks)

*Question No. **1** is compulsory.*

*Attempt any **four** questions out of the remaining **five** questions.*

1. (a) X Ltd. has entered into an agreement with Y Ltd. for supplying 1,50,000 empty bottles every year. X Ltd. estimates machine set up cost of ₹ 520 for per set up and carrying cost ₹ 0.05 per empty bottle per month.

(i) DETERMINE the optimum run size for empty bottle manufacture?

(ii) WHAT would be the interval between two consecutive optimum runs?

(iii) FIND out the minimum inventory cost per annum. **(5 Marks)**

(b) CALCULATE a suggested fare per passenger-km from the following information for a Mini Bus:

(i) Length of route: 30 km

(ii) Purchase price ₹ 4,00,000

(iii) Part of above cost met by loan, annual interest of which is ₹ 10,000 p.a.

(iv) Other annual charges: Insurance ₹ 15,000, Garage rent ₹ 9,000, Road tax ₹ 3,000, Repairs & maintenance ₹ 15,000, Administrative charges ₹ 5,000.

(v) Running Expenses: Driver & Conductor ₹ 5,000 p.m., Repairs/Replacement of tyre-tube ₹ 3,600 p.a., Diesel and oil cost per km ₹ 5.

(vi) Effective life of vehicle is estimated at 5 years at the end of which it will have a scrap value of ₹ 10,000.

(vii) Mini Bus has 20 seats and is planned to make Six no. two way trips for 25 days/p.m.

(viii) Provide profit @ 20% of total revenue. **(5 Marks)**

(c) 40 units of Part-B is required everyday for producing a product. A cost of ₹ 100 is incurred for placing an order and the inventory carrying cost is ₹ 0.06 per unit per day and the lead period is 26 days.

You are required to COMPUTE

(i) Economic Order Quantity

(ii) Re-order level **(4 Marks)**

2. (a) ABC Ltd has calculated a predetermined overhead rate of ₹ 22 per machine hour for its Testing 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.

Testing department

Total overheads	Number of machine hours
₹ 3,38,875	14,500
₹ 3,47,625	15,500
₹ 3,56,375	16,500

You are required to:

(a) CALCULATE the variable overhead absorption rate per machine hour.

(b) CALCULATE the estimated total fixed overheads.

(c) CALCULATE the budgeted level of activity in machine hours.

(d) CALCULATE the amount of under/over –recovery of overheads if the actual machine hours were 15,850 and actual overheads were ₹ 3,55,050.

(e) STATE the arguments for and against using departmental absorption rates as opposed to a single or blanket factory wide rate.

(10 Marks)

(b) DISCUSS the essentials of good Cost Accounting System. **(4 Marks)**

3. (a) Cost Ledger of Beta Ltd. shows the following balances as on 31st March.

	Dr.	Cr.
	₹	₹
Stores ledger control A/c	6,02,870	—
Work-in-progress ledger control A/c	2,44,730	—
Finished stock ledger control A/c	5,03,890	—
Manufacturing overhead control A/c	—	21,050
Cost ledger control A/c	—	13,30,440
	13,51,490	13,51,490

During the next three months, the transactions that took place is as follows:

	₹
Finished product (at cost)	4,21,670
Manufacturing overhead incurred	1,83,020
Raw materials purchased	2,46,000
Factory wages	1,01,060
Indirect labour	43,330
Cost of sales	3,71,780

Materials issued to production	2,54,630
Sales returned at cost	10,760
Materials returned to suppliers	5,800
Manufacturing overhead charged to production	1,54,400

You are required to WRITE UP the accounts and schedule the balances stating what each balance represents. **(7 Marks)**

(b) Outlook Ltd. produces and sells a single product. Sales budget for calendar year 2023 by quarters is as under:

Quarter	**I**	**II**	**III**	**IV**
No of units to be sold	12,000	15,000	16,500	18,000

The year is expected to open with an inventory of 4,000 units of finished products and close with an inventory of 6,500 units.

Production is customarily scheduled to provide for two-thirds of the current quarter's sales demand plus one-third of the following quarter's demand. Thus production anticipates sales volume by about one month.

The standard cost details for one unit of the product is as follows:

Direct materials 10 kgs @ 50 paise per kg.

Direct labour 1 hour 30 minutes @ ₹ 4 per hour

Variable overhead 1 hour 30 minutes @ ₹ 1 per hour

Fixed overheads 1 hour 30 minutes @₹ 2 per hour based on budgeted production volume of 90,000 direct labour hours for the year.

(i) PREPARE a Production budget for 2023, by quarters, showing the number of units to be produced and the total costs of direct material, direct labour, variable overhead and fixed overheads.

(ii) If the budgeted selling price per unit is ₹ 17, WHAT would be the budgeted profit for the year as a whole? **(7 Marks)**

4. (a) R Ltd has set standards for producing a product called 'X', which are as follows:

Direct Materials

3 units of A @ ₹ 3.5 per unit	₹ 10.50
6 units of B @ ₹ 5.00 per unit	₹ 30.00
4 units of C @ ₹ 4.25 per unit	₹ 17.00

Direct Labours

	Skilled Workers	Semi-Skilled workers	Un-skilled workers
Standard no. of workers	26	10	8
Standard wage rate per hour (₹)	5	4	2

The actual data are as follows:

During the 45 hours working week, the gang produced 1900 standard labour hours of work.

Company has produced 6000 units of the product during the last week and the materials and labours are as follows:

17,200 units of A @ ₹ 4.00 per unit

36,500 units of B @ ₹ 4.50 per unit

23,800 units of C @ ₹ 4.30 per unit

	Skilled Workers	Semi-Skilled workers	Un-skilled workers
Actual no. of workers	24	12	6
Actual wage rate per hour (₹)	6	4.25	3.25

You are required to CALCULATE:

(a) Material price variance

(b) Material usage variance

(c) Labour rate variance

(d) Labour mix variance

(e) Labour yield variance **(10 Marks)**

(b) The ratio of variable cost to sales is 80%. The break-even point occurs at 65% of the capacity sales. FIND the capacity sales when fixed costs are ₹ 65,000. Also COMPUTE profit at 95% of the capacity sales.

(4 Marks)

5. (a) Product-K passes through three processes. The output of each process is treated as the raw material of the next process to which it is transferred and output of the third process is transferred to finished stock.

	1st Process ₹	2nd Process ₹	3rd Process ₹
Material issued	45,000	23,500	11,200
Labour	6,100	4,280	1,200
Manufacturing overhead	9,800	9,800	16,100

10,000 units have been issued to the 1st process and after processing, the output of each process is as under :

	Output	Normal Loss
Process No. 1	9,600 units	3%
Process No. 2	9,300 units	6%
Process No. 3	8,000 units	7%

No stock of materials or of work-in-progress was left at the end. CALCULATE the cost of the finished articles. **(10 Marks)**

(b) HOW normal and abnormal loss of material arising during storage treated in Cost Accounts? **(4 Marks)**

6. (a) EXPLAIN the difference between Cost Accounting and Management Accounting **(5 Marks)**

(b) DISCUSS basic assumptions of Cost Volume Profit analysis. **(5 Marks)**

(c) DISTINGUISH between Fixed and flexible budget. **(4 Marks)**

OR

(d) DESCRIBE job Costing and Batch Costing giving example of industries where these are used. **(4 Marks)**