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) NG Ltd. has an annual fixed cost of ₹ 98,50,000. In the year 2022-23, sales amounted to ₹7,80,60,000 as compared to ₹5,93,10,000 in the preceding year 2021-22. Profit in the year 2022-23 is ₹37,50,000 more than that in 2021-22.

Required:

(i) CALCULATE Break-even sales of the company.

(ii) DETERMINE profit/ loss on a forecasted sales volume of ₹8,20,00,000.

(iii) If there is a reduction in selling price by 10% in the financial year 2022-23 and company desires to earn the same amount of profit as in 2021-22, COMPUTE the required sales amount?

(b) SP Ltd. has prepared budget for the coming year for its two products A and B.

	Product A (₹)	Product B (₹)
Production & Sales unit	6,000 units	9,000 units
Raw material cost per unit	60.00	42.00
Direct labour cost per unit	30.00	18.00
Variable overhead per unit	12.00	6.00
Fixed overhead per unit	8.00	4.00
Selling price per unit	120.00	78.00

After some marketing efforts, the sales quantity of the Product A & B can be increased by 1,500 units and 500 units respectively but for this purpose the variable overhead and fixed overhead will be increased by 10% and 5% respectively for the both products.

You are required to PREPARE flexible budget for both the products:

(i) Before marketing efforts

(ii) After marketing efforts

(c) A manufacturing company disclosed a net profit ₹10,20,000 as per their cost accounts for the year ended 31st March, 2023. The financial accounts however disclosed a net profit of ₹ 6,94,000 for the same period. The following information was revealed as a result of scrutiny of the figures of both the sets of accounts.

	(₹)
(i) Factory Overheads under-absorbed	80,000
(ii) Administration Overheads over-absorbed	1,20,000
(iii) Depreciation charged in Financial Accounts	6,50,000
(iv) Depreciation charged in Cost Accounts	5,50,000
(v) Interest on investments not included in Cost Accounts	1,92,000
(vi) Income-tax provided	1,08,000
(vii) Interest on loan funds in Financial Accounts	4,90,000
(viii) Transfer fees (credit in financial books)	48,000
(ix) Stores adjustment (credit in financial books)	28,000
(x) Dividend received	64,000

PREPARE a Reconciliation statement.

(d) A company manufactures 10,000 units of a product per month. The cost of placing an order is ₹200. The purchase price of the raw material is ₹20 per kg. The re-order period is 4 to 8 weeks. The consumption of raw materials varies from 200 kg to 900 kg per week, the average consumption being 550 kg. The carrying cost of inventory is 20% per annum.

You are required to CALCULATE:

(i) Re-order quantity (ii) Re-order level

(iii) Maximum level (iv) Minimum level

(v) Average stock level [4 × 5 Marks = 20 Marks]

2\. (a) JD Ltd. produces and markets a very popular product called 'X'. The company is interested in presenting its budget for the first quarter of 2023.

The following information are made available for this purpose:

(i) It expects to sell 50,000 bags of 'X' during the first quarter of 2023 at the selling price of ₹ 900 per bag.

(ii) Each bag of 'X' requires 2.5 kgs. of a raw – material called 'Y' and 7.5 kgs. of raw – material called 'Z'.

(iii) Stock levels are planned as follows:

Particulars	Beginning of Quarter	End of Quarter
Finished Bags of 'X' (Nos.)	15,000	11,000
Raw – Material 'Y' (Kgs.)	32,000	26,000
Raw – Material 'Z' (Kgs.)	57,000	47,000
Empty Bag (Nos.)	37,000	28,000

(iv) 'Y' cost ₹120 per Kg., 'Z' costs ₹20 per Kg. and 'Empty Bag' costs ₹80 each.

(v) It requires 9 minutes of direct labour to produce and fill one bag of 'X'. Labour cost is ₹50 per hour.

(vi) Variable manufacturing costs are ₹45 bag. Fixed manufacturing costs ₹30,00,000 per quarter.

(vii) Variable selling and administration expenses are 5% of sales and fixed administration and selling expenses are ₹20,50,000 per quarter.

Required

(i) PREPARE a production budget for the said quarter.

(ii) PREPARE a raw – material purchase budget for 'Y', 'Z' and 'Empty Bags' for the said quarter in quantity as well as in rupees.

(iii) COMPUTE the budgeted variable cost to produce one bag of 'X'.

(iv) PREPARE a statement of budgeted net income for the said quarter and show both per unit and total cost data. **[10 Marks]**

(b) K Ltd. has the following expenditures for the year ended 31st March, 2023:

Sl. No.		Amount (₹)	Amount (₹)
(i)	Raw materials purchased		10,00,00,000
(ii)	Freight inward		11,20,600
(iii)	Wages paid to factory workers		29,20,000
(iv)	Royalty paid for production		1,72,600
(v)	Amount paid for power & fuel (Directly related to production)		4,62,000
(vi)	Job charges paid to job workers		8,12,000
(vii)	Stores and spares consumed		1,12,000
(viii)	Depreciation on office building		56,000
(ix)	Repairs & Maintenance paid for:		
	- Plant & Machinery	48,000	
	- Sales office building	18,000	66,000
(x)	Insurance premium paid for:		
	- Plant & Machinery	31,200	
	- Factory building	18,100	49,300
(xi)	Expenses paid for quality control check activities		19,600
(xii)	Research & development cost paid improvement in production process		18,200
(xiii)	Expenses paid for pollution control and engineering & maintenance		26,600
(xiv)	Salary paid to Sales & Marketing mangers:		10,12,000
(xv)	Salary paid to General Manager		12,56,000
(xvi)	Packing cost paid for:		
	- Primary packing necessary to maintain quality	96,000	
	- For re-distribution of finished goods	1,12,000	2,08,000
(xvii)	Fee paid to independent directors		2,20,000
(xviii)	Performance bonus paid to sales staffs		1,80,000
(xix)	Value of stock as on 1st April, 2022:		
	- Raw materials	18,00,000	
	- Work-in-process	9,20,000	
	- Finished goods	11,00,000	38,20,000

(xx)	Value of stock as on 31st March, 2023:		
	- Raw materials	9,60,000	
	- Work-in-process	8,70,000	
	- Finished goods	18,20,000	36,50,000

Amount realized by selling of scrap and waste generated during manufacturing process – ₹86,000/-

From the above data you are requested to PREPARE Statement of cost for K Ltd. for the year ended 31st March, 2023, showing (i) Prime cost, (ii) Factory cost, (iii) Cost of Production, (iv) Cost of goods sold and (v) Cost of sales. **[10 Marks]**

3. (a) (1) KD Ltd. is following Activity based costing. Budgeted overheads, cost drivers and volume are as follows:

Cost pool	Budgeted overheads (₹)	Cost driver	Budgeted volume
Material procurement	18,42,000	No. of orders	1,200
Material handling	8,50,000	No. of movement	1,240
Maintenance	24,56,000	Maintenance hours	17,550
Set-up	9,12,000	No. of set-ups	1,450
Quality control	4,42,000	No. of inspection	1,820

The company has produced a batch of 7,600 units, its material cost was ₹24,62,000 and wages ₹4,68,500. Usage activities of the said batch are as follows:

Material orders	56
Material movements	84
Maintenance hours	1,420 hours
Set-ups	60
No. of inspections	18

Required:

(i) CALCULATE cost driver rates.

(ii) CALCULATE the total and unit cost for the batch.

(2) The following figures are related to KG Limited for the year ending 31st March, 2023:

Sales - 48,000 units @ ₹ 400 per unit;

P/V Ratio 25% and Break-even Point 50% of sales.

You are required to CALCULATE:

(i) Fixed cost for the year

(ii) Profit earned for the year

(iii) Units to be sold to earn a target net profit of ₹ 22,00,000 for a year.

(iv) Number of units to be sold to earn a net income of 25% on cost. **[5×2=10 Marks]**

(b) ABC Ltd. operates a simple chemical process to convert a single material into three separate items, referred to here as X, Y and Z. All three end products are separated simultaneously at a single split-off point.

Product X and Y are ready for sale immediately upon split off without further processing or any other additional costs. Product Z, however, is processed further before being sold. There is no available market price for Z at the split-off point.

The selling prices quoted here are expected to remain the same in the coming year. During 2022-23, the selling prices of the items and the total amounts sold were:

X – 186 tons sold for ₹3,000 per ton

Y – 527 tons sold for ₹2,250 per ton

Z – 736 tons sold for ₹1,500 per ton

The total joint manufacturing costs for the year were ₹12,50,000. An additional ₹6,20,000 was spent to finish product Z.

There were no opening inventories of X, Y or Z at the end of the year. The following inventories of complete units were on hand:

X 180 tons

Y 60 Tons

Z 25 tons

There was no opening or closing work-in-progress.

Required:

COMPUTE the cost of inventories of X, Y and Z and cost of goods sold for year ended March 31, 2023, using Net realizable value (NRV) method of joint cost allocation. **[10 Marks]**

4. (a) KV Ltd. manufactures luggage trolleys for airports. The factory, in which the company undertakes all of its production, has two production departments- 'Fabrication' and 'Assembly', and two service departments- 'Stores' and 'Maintenance'.

The following information have been extracted from the company's budget for the financial year ended 31st March, 2023:

Particulars	₹
Allocated Overhead Costs	
Fabrication Department	15,52,000
Assembly Department	7,44,000
Stores Department	2,36,000
Maintenance Department	1,96,000
Other Overheads	
Factory rent	15,28,000
Factory building insurance	1,72,000
Plant & machinery insurance	1,96,000
Plant & Machinery Depreciation	2,65,000
Subsidy for staffs' canteen	4,48,000

Direct Costs	₹	₹
Fabrication Department:		
Material	63,26,000	
Labour	8,62,000	71,88,000

Assembly Department:		
Material	1,42,000	
Labour	13,06,000	14,48,000

The following additional information is also provided:

	Fabrication Department	Assembly Department	Stores Department	Maintenance Department
Floor area (square meters)	24,000	10,000	2,500	3,500
Value of plant & machinery (₹)	16,50,000	7,50,000	75,000	1,75,000
No. of stores requisitions	3,600	1,400	---	---
Maintenance hours required	2,800	2,300	400	---
No. of employees	120	80	38	12
Machine hours	30,00,000	60,000		
Labour hours	70,000	26,00,000		

Required:

(i) PREPARE a table showing the distribution of overhead costs of the two service departments to the two production departments using step method; and

(ii) CALCULATE the most appropriate overhead recovery rate for each department. **[10 Marks]**

(b) Following are the standard cost for a product-X:

	(₹)
Direct materials 10 kg @ ₹ 90 per kg	900
Direct labour 8 hours @ ₹100 per hour	800
Variable Overhead 8 hours @ ₹15 per hour	120
Fixed Overhead	400
	2,220

Budgeted output for the year was 2,000 units. Actual output is 1,800 units.

Actual cost for year is as follows:

	(₹)
Direct Materials 17,800 Kg @ ₹ 92 per Kg.	16,37,600
Direct Labour 14,000 hours @ ₹ 104 per hour	14,56,000
Variable Overhead incurred	2,17,500
Fixed Overhead incurred	7,68,000

You are required to CALCULATE:

(i) Material Usage Variance

(ii) Material Price Variance

(iii) Material Cost Variance

(iv) Labour Efficiency Variance

(v) Labour Rate Variance

(vi) Labour Cost Variance

(vii Variable Overhead Cost Variance

(viii) Fixed Overhead Cost Variance. **[10 Marks]**

5. (a) MT Ltd. pays the followings to skilled workers engaged in production works. The following are the employee benefits paid to the employees:

(a)	Basic salary per day	₹1,000
(b)	Dearness allowance (DA)	20% of basic salary
(c)	House rent allowance	16% of basic salary
(d)	Transport allowance	₹50 per day of actual work
(e)	Overtime	Twice the hourly rate (considers basic and DA), only if works more than 9 hours a day otherwise no overtime allowance. If works for more than 9 hours a day then overtime is considered after 8th hours.
(f)	Work of holiday and Sunday	Double of per day basic rate provided works atleast 4 hours. The holiday and Sunday basic is eligible for all allowances and statutory deductions.
(h)	Earned leave & Casual leave	These are paid leave.
(h)	Employer's contribution to Provident fund	12% of basic and DA
(i)	Employer's contribution to Pension fund	7% of basic and DA

The company normally works 8-hour a day and 26-day in a month. The company provides 30 minutes lunch break in between.

During the month of August 2020, Mr. Z works for 23 days including 15th August and a Sunday and applied for 3 days of casual leave. On 15th August and Sunday he worked for 5 and 6 hours respectively without lunch break.

On 5th and 13th August he worked for 10 and 9 hours respectively.

During the month Mr. Z worked for 100 hours on Job no.HT200.

You are required to CALCULATE:

(i) Earnings per day

(ii) Effective wages rate per hour of Mr. Z.

(iii) Wages to be charged to Job no.HT200 **[10 Marks]**

(b) Arnav LMV Pvt. Ltd, operates cab/ car rental service in Delhi/NCR. It provides its service to the offices of Noida, Gurugram and Faridabad. At present it operates CNG fueled cars but it is also considering to upgrade these into Electric vehicle (EV). The following details related with the owning of CNG & EV propelled cars are as tabulated below:

Particulars	CNG Car	EV Car
Car purchase price (₹)	9,20,000	15,20,000
Govt. subsidy on purchase of car (₹)	--	1,50,000
Life of the car	15 years	10 years
Residual value (₹)	95,000	1,70,000
Mileage	20 km/kg	240 km per charge

Electricity consumption per full charge	--	30 Kwh
CNG cost per Kg (₹)	90	--
Power cost per Kwh (₹)	--	7.60
Annual Maintenance cost (₹)	8,000	5,200
Annual insurance cost (₹)	7,600	14,600
Tyre replacement cost in every 5 -year (₹)	16,000	16,000
Battery replacement cost in every 8- year (₹)	12,000	5,40,000

Apart from the above, the following are the additional information:

Particulars	
Average distance covered by a car in a month	1,500 km
Driver's salary (₹)	20,000 p.m
Garage rent per car (₹)	4,500 p.m
Share of Office & Administration cost per car (₹)	1,500 p.m

Required:

(i) CALCULATE the operating cost of vehicle per month per car for both CNG & EV options.

[10 Marks]

6. (a) EXPLAIN the difference between controllable & uncontrollable costs?

(b) DEFINE cost plus contract? STATE its advantages.

(c) "Is reconciliation of cost accounts and financial accounts necessary in case of integrated accounting system?" EXPLAIN.

(d) DISCUSS the impact of Information Technology in Cost Accounting. **[4 × 5 =20 Marks]**