

**MOCK TEST PAPER – I**  
**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) M Ltd. has an annual fixed cost of Rs. 98,50,000. In the year 20X8-X9, sales amounted to Rs.7,80,60,000 as compared to Rs.5,93,10,000 in the preceding year 20X7-X8. Profit in the year 20X8-X9 is Rs.37,50,000 more than that in 20X7-X8.

Required:

- (i) CALCULATE Break-even sales of the company;
- (ii) DETERMINE profit/ loss on a forecasted sales volume of Rs.8,20,00,000.
- (iii) If there is a reduction in selling price by 10% in the financial year 20X8-X9 and company desires to earn the same amount of profit as in 20X7-X8, COMPUTE the required sales amount?
- (b) Arnav Motors 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. Arnav Motors Ltd. is expected to have a market share of 1.15% of the total market demand of the pistons in the coming year. It is estimated that it costs Rs.1.50 as inventory holding cost per piston per month and that the set-up cost per run of piston manufacture is Rs. 3,500.
- (i) DETERMINE the optimum run size for piston manufacturing?
- (ii) Assuming that the company has a policy of manufacturing 40,000 pistons per run, CALCULATE how much extra costs the company would be incurring as compared to the optimum run suggested in (i) above?
- (c) From the following figures, CALCULATE cost of production and profit for the month of March 20X9.

	Amount (Rs.)		Amount (Rs.)
Stock on 1 <sup>st</sup> March, 20X9		Purchase of raw materials	28,57,000
- Raw materials	6,06,000	Sale of finished goods	1,34,00,000
- Finished goods	3,59,000	Direct wages	37,50,000
Stock on 31 <sup>st</sup> March, 20X9		Factory expenses	21,25,000
- Raw materials	7,50,000	Office and administration expenses	10,34,000

- Finished goods	3,09,000	Selling and distribution expenses	7,50,000
Work-in-process:		Sale of scrap	26,000
- On 1 <sup>st</sup> March, 20X9	12,56,000		
- On 31 <sup>st</sup> March, 20X9	14,22,000		

- (d) A manufacturing company disclosed a net loss of Rs.3,47,000 as per their cost accounts for the year ended March 31,20X8. The financial accounts however disclosed a net loss of Rs. 5,10,000 for the same period. The following information was revealed as a result of scrutiny of the figures of both the sets of accounts.

	(Rs.)
(i) Factory Overheads under-absorbed	40,000
(ii) Administration Overheads over-absorbed	60,000
(iii) Depreciation charged in Financial Accounts	3,25,000
(iv) Depreciation charged in Cost Accounts	2,75,000
(v) Interest on investments not included in Cost Accounts	96,000
(vi) Income-tax provided	54,000
(vii) Interest on loan funds in Financial Accounts	2,45,000
(viii) Transfer fees (credit in financial books)	24,000
(ix) Stores adjustment (credit in financial books)	14,000
(x) Dividend received	32,000

PREPARE a memorandum Reconciliation Account.

[4 × 5 Marks = 20 Marks]

2. (a) Aditya Agro Ltd. mixes powdered ingredients in two different processes to produce one product. The output of Process- I becomes the input of Process-II and the output of Process-II is transferred to the Packing department.

From the information given below, you are required to PREPARE accounts for Process-I, Process-II and Abnormal loss/ gain A/c to record the transactions for the month of February 20X9.

#### Process-I

Input:	
Material A	6,000 kilograms at Rs. 50 per kilogram
Material B	4,000 kilograms at Rs. 100 per kilogram
Labour	430 hours at Rs. 50 per hour
Normal loss	5% of inputs. Scrap are disposed off at Rs.16 per kilogram
Output	9,200 kilograms.

There is no work- in- process at the beginning or end of the month.

#### Process-II

Input:	
Material C	6,600 kilograms at Rs. 125 per kilogram
Material D	4,200 kilograms at Rs. 75 per kilogram
Flavouring Essence	Rs. 3,300

Labour	370 hours at Rs.50 per hour
Normal loss	5% of inputs with no disposal value
Output	18,000 kilograms.

There is no work-in-process at the beginning of the month but 1,000 kilograms in process at the end of the month and estimated to be only 50% complete so far as labour and overhead were concerned.

Overhead of Rs. 92,000 incurred to be absorbed on the basis of labour hours. **[10 Marks]**

- (b) A, B and C are three industrial workers working in Sports industry and are experts in making cricket pads. A, B and C are working in Mahi Sports, Virat Sports and Sikhar Sports companies respectively. Workers are paid under different incentive schemes. Company wise incentive schemes are as follows:

Company	Incentive scheme
Mahi Sports	Emerson's efficiency system
Virat Sports	Merrick differential piece rate system
Sikhar Sports	Taylor's differential piece work system

The relevant information for the industry is as under:

Standard working hours	8 hours a day
Standard output per hour (in units)	2
Daily wages rate	Rs. 360
No. of working days in a week	6 days

Actual outputs for the week are as follows:

A	B	C
132 units	108 units	96 units

You are required to CALCULATE effective wages rate and weekly earnings of all the three workers. **[10 Marks]**

3. (a) The following standards have been set to manufacture a product:

Direct Materials:	(Rs.)
2 units of X at Rs.40 per unit	80.00
3 units of Y at Rs. 30 per unit	90.00
15 units of Z at Rs.10 per unit	150.00
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	320.00
Direct labour 3 hours @ Rs. 55 per hour	165.00
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Total standard prime cost	485.00

The company manufactured and sold 6,000 units of the product during the year 20X8.

Direct material costs were as follows:

12,500 units of X at Rs. 44 per unit.

18,000 units of Y at Rs. 28 per unit.

88,500 units of Z at Rs.12 per unit.

The company worked 17,500 direct labour hours during the year 20X8. For 2,500 of these hours the company paid at Rs. 58 per hour while for the remaining hours the wages were paid at the standard rate.

Required:

COMPUTE the following variances:

Material Price, Material Usage, Material Mix, Material Yield, Labour Rate and Labour Efficiency.

[10 Marks]

- (b) Linex Limited manufactures three products P, Q and R which are similar in nature and are usually produced in production runs of 100 units. Product P and R require both machine hours and assembly hours, whereas product Q requires only machine hours. The overheads incurred by the company during the first quarter are as under:

Machine Department expenses.....	18,48,000
Assembly Department expenses.....	6,72,000
Setup costs.....	90,000
Stores receiving cost.....	1,20,000
Order processing and dispatch.....	1,80,000
Inspect and Quality control cost.....	36,000

The data related to the three products during the period are as under:

	P	Q	R
Units produced and sold	15,000	12,000	18,000
Machine hours worked	30,000 hrs.	48,000 hrs.	54,000 hrs.
Assembly hours worked (direct labour hours)	15,000 hrs.	-	27,000 hrs.
Customers' orders executed (in numbers)	1,250	1,000	1,500
Number of requisitions raised on the stores	40	30	50

Required

PREPARE a statement showing details of overhead costs allocated to each product type using activity based costing.

[10 Marks]

4. (a) From the details furnished below you are required to COMPUTE a comprehensive machine-hour rate:

Original purchase price of the machine (subject to depreciation at 10% per annum on original cost)	Rs. 6,48,000
Normal working hours for the month (The machine works for only 75% of normal capacity)	200 hours
Wages to Machine-man	Rs. 400 per day (of 8 hours)
Wages to Helper (machine attendant)	Rs. 275 per day (of 8 hours)
Power cost for the month for the time worked	Rs. 65,000
Supervision charges apportioned for the machine centre for the month	Rs. 18,000
Electricity & Lighting for the month	Rs. 9,500

Repairs & maintenance (machine) including Consumable stores per month	Rs. 17,500
Insurance of Plant & Building (apportioned) for the year	Rs. 18,250
Other general expense per annum	Rs. 17,500

The workers are paid a fixed Dearness allowance of Rs. 4,575 per month. Production bonus payable to workers in terms of an award is equal to 33.33% of basic wages and dearness allowance. Add 10% of the basic wage and dearness allowance against leave wages and holidays with pay to arrive at a comprehensive labour-wage for debit to production. **[10 Marks]**

- (b) M/s. Bansals Construction Company Ltd. took a contract for Rs. 60,00,000 expected to be completed in three years. The following particulars relating to the contract are available:

	20X7 (Rs.)	20X8 (Rs.)	20X9 (Rs.)
Materials	6,75,000	10,50,000	9,00,000
Wages	6,20,000	9,00,000	7,50,000
Transportation cost	30,000	90,000	75,000
Other expenses	30,000	75,000	24,000
Cumulative work certified	13,50,000	45,00,000	60,00,000
Cumulative work uncertified	15,000	75,000	—

Plant costing Rs. 3,00,000 was bought at the commencement of the contract. Depreciation was to be charged at 25% per annum, on the written down value method. The contractee pays 75% of the value of work certified as and when certified, and makes the final payment on completion of the contract.

You are required to PREPARE a contract account for three years. **[10 Marks]**

5. (a) A transport company has a fleet of three trucks of 10 tonnes capacity each plying in different directions for transport of customer's goods. The trucks run loaded with goods and return empty. The distance travelled, number of trips made and the load carried per day by each truck are as under:

Truck No.	One way Distance Km	No. of trips per day	Load carried per trip / day tonnes
1	16	4	6
2	40	2	9
3	30	3	12

The analysis of maintenance cost and the total distance travelled during the last two years is as under

Year	Total distance travelled	Maintenance Cost (Rs.)
1	1,60,200	46,050
2	1,56,700	45,175

The following are the details of expenses for the year under review:

Diesel	Rs. 65 per litre. Each litre gives 4 km per litre of diesel on an average.
Driver's salary	Rs. 24,000 per month
Licence and taxes	Rs. 25,000 per annum per truck

Insurance	Rs. 45,000 per annum for all the three vehicles
Purchase Price per truck	Rs. 30,00,000, Life 10 years. Scrap value at the end of life is Rs. 1,00,000.
Oil and sundries	Rs. 250 per 100 km run.
General Overhead	Rs. 1,15,600 per annum

The vehicles operate 24 days per month on an average.

On the basis of commercial tone-km, you are required to:

- (i) PREPARE an Annual Cost Statement covering the fleet of three vehicles.
  - (ii) CALCULATE the cost per km. run.
  - (iii) DETERMINE the freight rate per tonne km. to yield a profit of 10% on freight. **[10 Marks]**
- (b) S Ltd. has prepared budget for the coming year for its two products A and B.

	Product A (Rs.)	Product B (Rs.)
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:

- (a) Before marketing efforts
  - (b) After marketing efforts. **[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]**