PAPER 8 - COST ACCOUNTING

SUGGESTED ANSWERS

SECTION – A

1.

(i) (C)

(ii) (C)

(iii) (C)

(iv) (A)

(v) (C)

(vi) (A)

(vii) (B)

(viii) (B)

(ix) (C)

(x) (B)

(xi) (A)

(xii) (B)

(xiii) (A)

(xiv) (C)

(xv) (B)

SECTION – B

2. (a)

Cost Sheet for the month of September 2024:

Particulars	(₹)
Opening Stock of Raw Material	20000
Add : Purchases	165000
Less : Closing Stock of Raw Material	(35000)
Raw Material Consumed	150000
Add : Direct Labour Cost	120000
Prime Cost	270000
Add : Factory Overheads	100000
Gross Work Cost	370000
Add : Opening Work – in – progress	20000
Less : Closing Work – in – progress	(30000)
Works Cost	360000
Cost of Production	360000
Add : Opening Stock of finished goods	50000
Less : Closing Stock of finished goods	(60000)
Cost of Goods sold	350000
Add : General and administration expenses	18000
Add : Selling Expenses	22000
Cost of Sales	390000
Profit	110000
Sales	500000

Alternative:

Cost of Goods sold	350000
Add : General and administration expenses	18000
Add : Selling Expenses	22000
Add : Distribution overhead	10000
Cost of Sales	400000
Profit	100000
Sales	500000

2. (b)

(i) Minimum stock of P:

= 8000 – (200 x 10 x 2) = 4000 kgs

(ii) Minimum stock of Q:

= 4750 – (200 x 4 x 4) = 1550 kgs

(iii) Re-order level of R:

= 4 x 225 x 6 = 5400 kgs

OR

Re-order level of R:

= 2000 + [(200 x 6) x 3] = 5600 kgs.

(iv) Average stock level of P:

= 4000 +0.5 x 10000 = 4000 + 5000 = 9000 kgs.

OR

Average Stock level of P:

$$\frac{4000 + 16250}{2} = 10125 \text{ kgs}$$

3. (a)

(i) Amount of under - absorption of overheads during the year 2023 – 24

	₹	₹
Total production overheads actually incurred during the year		3550000
Less : Wages paid during strike period	200000	
Wages of previous year booked in current Year	100000	300000
Net production overheads actually incurred:		3250000
Production overheads absorbed by 1.50 lakh man-days @ ₹ 20 per man - day :		3000000
Amount of under-absorption of production overheads:		250000

(ii) Accounting treatment of under absorption of production overheads :

It is given in the statement of the question that 62000 units (50000 sold + 12000 closing stock – 0 opening stock) were completely finished and 20000 units were 65% complete, 40% of the under-absorbed overheads were due to factory inefficiency and the rest were attributable to increase in cost of indirect materials and indirect labour.

	₹
This being abnormal, should be debited to the Costing Profit and Loss A/c.	100000
Balance ₹ 150000 of under– absorbed overheads should be distributed over work-in- progress, finished goods and cost of sales by using supplementary rate.	150000
Total under-absorbed overheads	250000

Apportionment of unabsorbed overheads of ₹150000 over work-in-progress, finished goods and cost of sales

	Equivalent Completed Units	(₹)
Work-in-progress	13000	26000
Finished goods	12000	24000
Cost of Sales	50000	100000
	75000	150000

Supplementary Overhead Absorption Rate: $\frac{150000}{75000}$ = ₹2

3. (b)

Profit and Loss Account (As per financial records)

	(₹)		(₹)
To Direct Material	5000000	By Sales (120000 units)	12000000
To Direct Wages	3000000	By Closing Stock	
To Factory Overheads	1600000	WIP	240000
To Gross Profit	2960000	Finished Goods (4000 units)	320000
	12560000		12560000
To Administration Overheads	700000	By Gross Profit b/d	2960000
To Selling and Distribution	960000	By Dividend	100000
To Bad Debts	80000	By Interest	20000
To Preliminary Expenses Written off	40000		
To Legal Charge	10000		
To Net Profit	1290000		
	3080000		3080000

Statement of Cost and Profit (As per Cost records)

		Total (₹)
	Direct Material	5600000
	Direct Wages	3000000
	Prime Cost	8600000
	Factory Overhead	1720000
		10320000
Less :	Closing Stock (WIP)	(240000)
	Works Cost (124000 units)	10080000
	Administration overhead	744000
	Cost of production of (124000 units)	10824000
Less :	Finished Goods	(349160)
	Cost of goods sold (120000 units)	10474840
	Selling and Distribution Overhead	960000
	Cost of Sales	11434840
	Net profit	565160
	Sales Revenue	12000000

Statement of Reconciliation of Profit as obtained under Cost and Financial Accounts

		(₹)	(₹)
	Profit as per Cost Records		565160
Add :	Excess of Material Consumption	600000	
	To Factory Overhead	120000	
	To Administration Overhead	44000	
	Dividend Received	100000	
	Interest Received	20000	884000
			1449160
Less :	Bad debts	80000	
	Preliminary expenses written off	40000	
	Legal Charges	10000	
	Over-valuation of stock in cost book	29160	(159160)
	Profit as per Financial Records		1290000

4. (a)

(i) **Total effective passenger Kms. per month :**

Sweet Village and back	= 2 x 250 x (90% of 60) x 10	= 270000 P.Kms.
Rajpur & back	= 2 x 200 x (80% of 60) x 10	= 192000 P.Kms.
Local Trips	= 5 x 80 x 60	= 24000 P.Kms.
	Passenger Kms.	= 486000

Statement showing Operating Cost and Profit and Fare Rate to be charged per passenger KM, for the month

Particulars	Amount (₹)	Amount (₹)
Fixed Expenses :		
Driver's Salary	20000	
Conductor's Salary	12000	
Part time Clerk's Salary	6000	
Insurance	2000	
Token Tax	3000	
Permit Fee	4000	
Depreciation	118000	165000
Running Expenses :		
Repair and Maintenance	17236	
Diesel	84600	
L. Oil	37600	
Sundry Expenses	5389	144825
Total Cost		309825
Add : 25% Profit on takings		103275
Total Takings (Total Fare)		413100
Effective passenger Kms. per month		486000
Rate per passenger Km.		₹0.85

Fare Rate to be Charges per Passenger:

To Sweet Village from Newtown = ₹ 213

To Rajpur from Newtown = ₹ 170

Local Trip from Newtown = ₹ 68

4. (b)

(i) Contract Account for the year ended March 31, 2024.

	(₹)		(₹)
To Materials issued	251000	By Machine	246000
To Labour Charges	565600		
To Foreman Salary	81300	By Material (in Hand)	35400
To Machine	260000	By Work Cost	1049000
To Supervisor's Salary	36000		
To Adm. Charges	136500		
	1330400		1330400
To Work Cost	1049000	By Work Certified	1000000
To Notional Profit	213250	By Work uncertified	262250
	1262250		1262250
To Profit & Loss A/c.	106625	By Notional Profit	213250
To Work-in-Progress	106625		
	213250		213250

(ii) Profit to be transferred to Profit & Loss Account of the Company will be: ₹ 106625.

5. (a)

(i) Process A Account

Particulars	Units	Amount (₹)	Particulars	Units	Amount (₹)
To Input	8000	72000	By Normal Loss	400	800
To Direct Wages		12000	By Abnormal Loss	100	1250
To Direct Exp.		6000			
To Overheads (1:2)		5800	By Process B A/c.	5000	62500
			By Profit and Loss A/c.	2500	31250
	8000	95800		8000	95800

Cost of abnormal Loss in process= 12.50 per unit

Process B Account

Particulars	Units	Amount (₹)	Particulars	Units	Amount (₹)
To Process A A/c.	5000	62500	By Normal Loss	500	5000
To Direct Wages		24000	By Finished Stock A/c. or Profit & Loss A/c.	4800	104640
To Direct Exp.		5000			
To Overheads		11600			
To Abnormal Gain	300	6540			
	5300	109640		5300	109640

Cost of Abnormal Gain = ₹ 21.80

(ii) Profit & Loss Account

Particulars		Amount (₹)	Particulars		Amount (₹)
To Cost of Sales			By Sales :		
Process A	31250		**Process A**	37500	
Process B	104640	135890	**Process B**	120000	157500
To Abnormal Loss:			By Abnormal gain:		
Process A		1050	**Process B**		3540
To Selling expenses		5000			
To Net Profit		19100			
		161040			**161040**

5. (b)

Basic Calculation

	Material S	Material T	Total
Standard Quantity for			
Actual Output (SQ)	60	40	100
Actual Quantity (AQ)	44	66	110
Required Quantity (RQ)	66	44	110

Standard Showing the Basic Calculations for the Computation of Material Cost Variance

Type of Material	SQ for AQ	SP	SQ x SP (1)	AQ	AP	AQ x AP (2)	AQ x SP (3)	RQ	RQ x SP (4)
Material S	60	20	1200	44	25	1100	880	66	1320
T	40	10	400	66	5	330	660	44	440
Input	100			110					
Less : Loss	10			20					
	90		**1600**	**90**		**1430**	**1540**		**1760**

Material Cost Variance:

= ₹ 1600 – ₹ 1430 = ₹ 170 (F)

Material Price Variance:

Material S = ₹ 880 – ₹ 1100 = ₹ 220 (A)

Material T = ₹ 660 – ₹ 330 = ₹ 330 (F)

MPV = ₹ 110 (F)

Material Usage Variance:

Material S = ₹ 1200 – ₹ 880 = ₹ 320 (F)

Material T = ₹ 400 – ₹ 660 = ₹ 260 (A)

MUV = ₹ 60 (F)

Material Mix Variance:

Material S = ₹ 1320 – ₹ 880 = ₹ 440 (F)

Material T = ₹ 440 – ₹ 660 = ₹ 220 (A)

MMV = ₹ 220 (F)

Material Yield Variance = ₹ 160 (A)

6.

(i) P/V Ratio = $\frac{15 - 7.50}{15} X100 = 50\%$

Let S be the desired Sales

Accordingly, Contribution = 0.50 S and desired Profit = 0.25 S

Contribution – Profit = Fixed Cost

= 0.50 S – 0.25 S = ₹600000

S = $\frac{600000}{0.25}$ = ₹2400000

Hence, the desired Sales = ₹ 2400000

(ii)

	₹
Present Variable cost per unit	6.50
Less: Variable selling and distribution overheads per unit	0.90
	5.60
Add: Special packing cost per unit	2.00
Revised variable cost per unit	7.60
The break-even price per unit for this additional offer of 30,000 units would be ₹ 7.60 per unit, In other words the breakeven price for this additional offer here means the price per unit at which 30,000 units offer can be accepted without earning any profit on it. **Note:** The existing business will bear the impact of fixed cost. Fixed costs will not affect this additional offer of 30,000 units.	

(iii)

	₹
New selling price per unit	18.00
Less: Variable cost per unit	6.50
Contribution per unit	11.50
Total contribution	1380000
Less: Present fixed cost	600000
Less: Additional expenditure on advertising	300000
Profit	480000
Justification: The amount of profit on the sale of 1,00,000 units was ₹ 2,50,000 (Refer to the statement of the question). On increasing the sale of product units from 1,00,000 to 1,20,000 the profit of the concern increased from ₹ 2,50,000 to ₹ 4,80,000 therefore, the expenditure on advertisement is justifiable and the proposal under consideration is viable.	

(iv)

Revised selling price per unit	13.00
Less : Variable Cost per unit	6.50
Contribution per unit	6.50
Total contribution of 100% capacity utilization	975000
Less : Fixed Cost	600000
Profit	375000
Justification: A reduction in selling price by ₹ 2 per unit for 100% Capacity utilization increases the present Profit of ₹ 250000 to ₹ 375000. Hence the reduction in Selling price is justified.	

7. (a)

Flexible Budget - For the Month of September 2024

	80 % (₹)	**90 % (₹)**	**100 % (₹)**	**110 % (₹)**
Sales	600000	675000	750000	825000
Administration Costs:				
Office Salaries (fixed)	90000	90000	90000	90000
General expenses	12000	13500	15000	16500
Depreciation (fixed)	7500	7500	7500	7500
Rent and rates (fixed)	8750	8750	8750	8750
Total Adm. Costs	118250	119750	121250	122750
Selling Costs:				
Salaries	48000	54000	60000	66000
Travelling expenses	12000	13500	15000	16500

Sales office	6000	6750	7500	8250
General expenses	6000	6750	7500	8250
Total Selling Costs	72000	81000	90000	99000
Distribution Costs:				
Wages (fixed)	15000	15000	15000	15000
Rent	6000	6750	7500	8250
Other expenses	24000	27000	30000	33000
Total Distribution Costs	45000	48750	52500	56250
Total Costs	235250	249500	263750	278000

7. (b)

The Object and Scope of CAS – 5 are stated below:

Objective:

(a) To bring uniformity in the application of principles and methods used in the determination of averaged / equalized Transportation Cost.

(b) To prescribe the system to be followed for maintenance of records for collection of cost of transportation, its allocation/apportionment to cost centres, locations or products.

(c) To provide transparency in the determination of cost of transportation.

Scope :

This standard should be applied for calculation of cost of transportation required under any statute or regulations or for any other purpose. For example, this standard can be used for:

(a) Determination of average transportation cost for claiming the deduction for arriving at the assessable value of goods and services.

(b) Insurance claim valuation.

(c) Working out claim for freight subsidy under Fertilizer Industry Coordination Committee.

(d) Administered price mechanism of freight cost element.

(e) Determination of inward freight costs included or to be included in the cost of purchases attributable to the acquisition.

(f) Computation of freight included in the value of inventory for accounting on inventory or valuation of stock hypothecated with Banks / Financial Institution ...etc.

8. (a)

Objection of Cost Accounting:

The objectives are Summaried in the following lines

1. To ascertain the cost of production on per unit basis, for example, cost per kg, cost per meter, cost per litre, cost per ton etc.
2. Cost accounting helps in the fixation of selling price. Cost accounting enables to determine the cost of production which helps to fix the selling price.
3. Cost accounting helps in cost control and cost reduction.
4. Ascertainment of division wise, activity wise and unit wise profitability is analysed through cost accounting.
5. Cost accounting also helps in locating wastages, inefficiencies and other gaps in the production processes/ services offered.
6. Cost accounting helps in presentation of relevant data to the management which helps in decision making. Decision making is the most important functions of Management which has specific linkages to the strategic success/failure of an organisation.

8. (b)

Advantages of Just-in-Time (JIT):

The advantages of Just-in-Time system are as follows:

(a) Increased emphasis on supplier relationships. A company without inventory does not want a supply system problem that creates a part shortage. This makes supplier relationships extremely important.

(b) Supplies come in at regular intervals throughout the production day. Supply is synchronized with production demand and the optimal amount of inventory is on hand at any time. When parts move directly from the truck to the point of assembly, the need for storage facilities is reduced.

(c) Reduces the working capital requirements, as very little inventory is maintained.

(d) Minimizes storage space.

(e) Reduces the chance of inventory obsolescence or damage.

8. (c)

Disclosures of CAS – 3 on Production and Operation Overheads:

The cost statements shall disclose the following:

(a) The basis of assignment of Production or Operation Overheads to the cost objects.

(b) Production or Operation Overheads incurred in foreign exchange.

(c) Production or Operation Overheads relating to resources received from or supplied to related parties.

(d) Any Subsidy, Grant, Incentive or any amount of similar nature received or receivable reduced from Production or Operation Overheads.

(e) Credits or recoveries relating to the Production or Operation Overheads.

(f) Any abnormal cost not forming part of the Production or Operation Overheads.

(g) Any unabsorbed Production or Operation Overheads.