Time Allowed: 3 Hours **Full Marks: 100**

The figures in the margin on the right side indicate full marks.

SECTION – A (Compulsory)

1. Choose the correct option: **[15 x 2 = 30]**

(i) If fixed manufacturing costs are ₹ 50,000 and the number of units produced is 5,000, what is the fixed cost per unit?
a. ₹10
b. ₹5
c. ₹50
d. ₹0.1

(ii) _____ is a method of dealing with overheads which involves spreading common costs over cost centers on the basis of benefit received.
a. overhead absorption
b. overhead apportionment
c. overhead allocation
d. overhead analysis

(iii) Standard price of material per kg ₹ 20, standards consumption per unit of production is 5 kg. Standard material cost for producing 100 units is
a. ₹ 20,000
b. ₹ 12,000
c. ₹ 8,000
d. ₹ 10,000

(iv) In a period, 11280 kilograms of material were used at a total standard cost of ₹ 46,248. The material usage variance was ₹ 492 adverse. What was the standard allowed weight of material for the period?
a. 11600 kg
b. 11160 kg
c. 12190 kg
d. 10590 kg

(v) What defines an integrated accounting system?
a. Separation of cost and financial records
b. Streamlining reconciliation
c. Sole reliance on financial principles
d. Consolidation of cost and financial information

(vi) A company has set up a laboratory for testing of products for compliance with standards. Salary of this laboratory stuffs are part of:
a. Direct expenses
b. Quality control cost
c. Works overheads
d. Research and development cost

(vii) CAS 9 specifically deals with:
a. Employee Cost
b. Packing Material Cost
c. Direct Expenses
d. Repairs and Maintenance Cost

(viii) In which of the following methods of pricing, costs lag behind the current economic values?
a. Replacement price method
b. Last in first out price method
c. First in first out price method
d. Weighted average price method

(ix) Which of the following is deducted from the total cost to calculate the net profit?
a. Selling Expenses
b. Opening Stock
c. Direct Materials
d. Indirect Labour

(x) What type of cost is incurred to support multiple cost objects but cannot be directly traced to any specific one?
a. Direct Cost
b. Indirect Cost
c. Variable Cost
d. Fixed Cost

(xi) A company operates a job costing system. Job number 6789 will require ₹ 345 of direct materials and ₹ 210 of direct labour, which is paid ₹ 14 per hour. Production overheads are absorbed at the rate of ₹ 30 per direct labour hour and non-production overheads are absorbed at the rate of 40% of prime cost. Required What is the total expected cost of the job?
a. ₹ 7,221
b. ₹ 1,272
c. ₹ 2,127
d. ₹ 1,227

(xii) The budget that is prepared first of all is _____.
a. Master budget
b. Sales budget assuming that it is the key factor
c. Cash Budget
d. Capital expenditure budget

(xiii) A company employs three drivers to deliver goods to its customers. The salaries paid to these drivers are:
a. a part of prime cost
b. a direct production expense
c. a production overhead
d. a selling and distribution overhead

(xiv) Which section of the Companies Act, 2013, deals with the adoption and adherence to Cost Accounting Standards (CAS)?
a. Section 135
b. Section 148
c. Section 170
d. Section 184

(xv) When a company wants to prepare a factory overhead budget in which the estimated costs are directly derived from the estimates of activity levels, which of the following budget should be prepared by the company?
a. Flexible budget
b. Fixed budget
c. Master budget
d. R & D budget

Answer:

(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)	(xiv)	(xv)
a	b	d	b	d	b	b	c	a	b	d	b	d	b	a

SECTION-B

(Answer any five questions out of seven questions given. Each question carries 14 Marks)

[5x14=70]

2. (a) PR Ltd manufactures and sells a typical brand of Tiffin Boxes under its on brand name. The installed capacity of the plant is 1,20,000 units per year distributable evenly over each month of calendar year. The Cost Accountant of the company has informed the following cost structure of the product, which is as follows:
Raw Material ₹ 20 per unit.

Direct Labour ₹ 12 per unit.
Direct Expenses ₹ 2 per unit
Variable Overheads ₹ 16 per unit
Fixed Overheads ₹ 3,00,000.
Semi-variable Overheads are as follows:
₹7,500 per month upto 50% capacity and additional ₹2,500 per month for every additional 25% capacity utilization or part thereof.
The plant was operating at 50% capacity during the first seven months of the calendar year 2025, at 100% capacity in the remaining months of the year.
The selling price for the period from 1st January, 2025 to 31st July, 2025 was fixed at ₹ 69 per unit. The firm has been monitoring the profitability and revising the selling price to meet its annual profit target of ₹ 8,00,000. Identify the selling price per unit for the period from 1st August, 2025 to 31st December, 2025.
Illustrate the cost sheet clearly showing the total and per unit cost, as well as the profit for the period.
1. From 1st January to 31st July, 2025.
2. From 1st August to 31st December, 2025. **[7]**

Answer:

Cost Sheet

Capacity Utilisation Period	**50% Capacity 1st January – 31st July**	**100% Capacity 1st August– 31st December**
Units	1,20,000 /12 × 7 × 50% = 35,000	1,20,000 /12 × 5 × 100% = 50,000
Raw Material	20 × 35,000 =7,00,000	20 × 50,000 = 10,00,000
Direct Labour	12 × 35,000 = 4,20,000	12 × 50,000 = 6,00,000
Direct Expenses	2 × 35,000 = 70,000	2 × 50,000 = 1,00,000
Variable Overheads	16 × 35,000 = 5,60,000	16 × 50,000 = 8,00,000
Fixed Overheads	3,00,000/12 × 7= 1,75,000	3,00,000/12 × 5= 1,25,000
Semi-Variable Overhead	7,500 × 7= 52,500	12,500 × 5 = 62,500
Total Cost	19,77,500	26,87,500
Profit (WN 1)	4,37,500	3,62,500
Sales (WN 2)	69 × 35,000 = 24,15,000	30,50,000
Selling Price per unit (WN 2)	69	30,50,000/ 50,000 = 61
Cost per unit	19,77,500/35,000 = 56.50	26,87,500 /50,000 = 53.75

Working Notes:

1. Selling Price for 1st January – 31st July = ₹69

   ∴ Sales = 69 × 35,000 = ₹24,15,000

Profit for 1st January – 31st July = 24,15,000 – 19,77,500 = ₹4,37,500

2. Expected total profit for the year ₹8,00,000

∴ Profit to earn from 1st August – 31st December = 8,00,000 – 4,37,500 = ₹3,62,500

∴ Expected Sale from 1st August – 31st December = ₹30,50,000

Expected Selling price per unit from 1st August – 31st December = (₹ 30,50,000)/50,000 = ₹ 61

(b) ZION LTD uses three types of materials A, B and C for production of Product-P for which the following data apply:

Raw Material	Usage per unit of Product (kgs)	Reorder quantity (kgs)	Price per Kg (₹)	Delivery period (in weeks)			Reorder level (kgs)	Minimum level (kgs)
				Minimum	Average	Maximum		
A	10	10000	0.10	1	2	3	8000	?
B	4	5000	0.30	3	4	5	4750	1550
C	6	10000	0.15	2	3	4	?	2000

Weekly production varies from 175 to 225 units, averaging 200 units of the said product. Calculate the following quantities?

(i) Minimum stock of A,

(ii) Maximum stock of B,

(iii) Re-order level of C,

(iv) Average stock level of A. **[7]**

Answer:

(a)

(i) Minimum stock of A

Re-order level - (Average rate of consumption x Average time required to obtain fresh delivery)

= 8,000kgs. - (200 x 10 x 2) kgs = 4,000 kgs.

(ii) Maximum stock of B

Re-order level - (Minimum consumption x Minimum delivery period) + Re-order quantity

= 4,750kgs. - (175 x 4 x 3)kgs. + 5,000kgs.

= 9,750 - 2,100 = 7,650 kgs.

(iii) Re-order level of C

Maximum delivery period x Maximum usage

= 4 x 225 x 6 = 5,400 kgs.

OR

Re-order level of C

= Minimum stock of C + [Average rate of consumption x Average time required to obtain fresh delivery]
= 2,000kgs. + [(200 x 6) x 3] kgs. = 5,600 kgs.

(iv) Average stock level of A
= Minimum stock level of A + ½ Re-order quantity of A
= 4,000kgs.+ ½ x 10,000kgs. = 4,000kgs. + 5,000kgs. = 9,000 kgs.
OR
Average Stock Level of A
(Minimum Stock level of A + Maximum Stock Level of A) / 2 = (Refer to working note)
(4,000 + 16,250)/2 = 10,125 Kgs.

Working note:
Maximum stock level of A= ROL+ ROQ - (Minimum consumption x Minimum re-order period)
= 8,000kgs. + 10,000kgs.- [(175 x 10) x 1] kgs.
= 16,250 kgs.

3. (a) DOZIN Ltd. manufactures a single product. It recovers factory overheads at a pre-determined rate of ₹ 20 per man day.
During the year 2024-25, the total factory overheads incurred and the man-days actually worked were ₹ 35.50 lakhs and 1.50 lakh days respectively. Out of the amount of ₹ 35.50 lakhs, ₹ 2.00 lakhs were in respect of wages for strike period and ₹ 1.00 lakh was in respect of expenses of previous year booked in this current year. During the period, 50000 units were sold. At the end of the period, 12000 completed units were held in stock but there was no opening stock of finished goods. Similarly, there was no stock of uncompleted units at the beginning of the period but at the end of the period there were 20000 uncompleted units which may be treated as 65% complete in all respects.
On investigation, it was found that 40% of the unabsorbed overheads were due to factory inefficiency and the rest were attributable to increase in the cost of indirect materials and indirect labour.
Required:
(i) Calculate the amount of unabsorbed overheads during the year 2024-25.
(ii) Analyze the accounting treatment of unabsorbed overheads in cost Accounts. **[7]**

Answer:
(a)
(i) Amount of under - absorption of overheads during the year 2024– 25

	₹	₹
Total production overheads actually incurred during the year		35,50,000
Less : Wages paid during strike period	2,00,000	
Wages of previous year booked in current Year	1,00,000	3,00,000

Net production overheads actually incurred:		32,50,000
Production overheads absorbed by 1.50 lakh man-days @ D 20 per man - day :		30,00,000
Amount of under-absorption of production overheads:		2,50,000

(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.	1,00,000
Balance D 150000 of under– absorbed overheads should be distributed over work-in- progress, finished goods and cost of sales by using supplementary rate.	1,50,000
Total under-absorbed overheads	2,50,000

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

	Equivalent Completed Units	(₹)
Work-in-progress	13,000	26,000
Finished goods	12,000	24,000
Cost of Sales	50,000	1,00,000
	75,000	1,50,000

Supplementary Overhead Absorption Rate: 1,50,000/75,000 = ₹ 2

(b)The following information is available from the Financial Books of SONT Ltd. newly established company for the year ended 31st March 2025,

(Amount in ₹)

Direct Material Consumption	**50,00,000**
Direct Wages	**30,00,000**
Factory Overhead	**16,00,000**
Administrative Overhead	**7,00,000**
Selling and Distribution Overhead	**9,60,000**
Bad Debts	**80,000**
Preliminary Expenses written off	**40,000**
Legal Charges	**10,000**
Dividends Received.	**1,00,000**
Interest Received on Deposits	**20,000**

Sales (120000 units)	**120,00,000**
Closing Stock:	
Finished Goods (4000 units)	**3,20,000**
Work-in-progress	**2,40,000**
Profit (Net) for the year 2024-25	**12,90,000**

The cost accounts for the same period reveal that the direct material consumption was ₹56,00,000. Factory overhead is recovered at 20% on prime cost.
Administration overhead is recovered at ₹6 per unit of production. Selling and distribution overheads are recovered at ₹8 per unit sold
Required:
(i) Prepare the Profit and Loss Accounts both as per financial records and as per cost records.
(ii) Reconcile the profits as per the two records. **[7]**

Answer: (b)

Profit and Loss Account (As per financial records)

Particulars	(₹)	Particulars	(₹)
To Direct Material	50,00,000	By Sales (120000 units)	120,00,000
To Direct Wages	30,00,000	By Closing Stock	
To Factory Overheads	16,00,000	WIP	2,40,000
To Gross Profit	29,60,000	Finished Goods (4000 units)	3,20,000
	125,60,000		**125,60,000**
To Administration Overheads	7,00,000	By Gross Profit b/d	29,60,000
To Selling and Distribution	9,60,000	By Dividend	1,00,000
To Bad Debts	80,000	By Interest	20,000
To Preliminary Expenses Written off	40,000		
To Legal Charge	10,000		
To Net Profit	12,90,000		
	30,80,000		**30,80,000**

Statement of Cost and Profit (As per Cost records)

		Total (₹)
	Direct Material	56,00,000
	Direct Wages	30,00,000
	Prime Cost	86,00,000
	Factory Overhead	17,20,000

		103,20,000
Less :	Closing Stock (WIP)	(2,40,000)
	Works Cost (124000 units)	**100,80,000**
	Administration overhead	7,44,000
	Cost of production of (124000 units)	**108,24,000**
Less :	Finished Goods	(3,49,160)
	Cost of goods sold (120000 units)	**104,74,840**
	Selling and Distribution Overhead	9,60,000
	Cost of Sales	**114,34,840**
	Net profit	5,65,160
	Sales Revenue	**120,00,000**

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

		(₹)	**(₹)**
	Profit as per Cost Records		**5,65,160**
Add :	Excess of Material Consumption	6,00,000	
	To Factory Overhead	1,20,000	
	To Administration Overhead	44,000	
	Dividend Received	1,00,000	
	Interest Received	20,000	8,84,000
			14,49,160
Less :	Bad debts	80,000	
	Preliminary expenses written off	40,000	
	Legal Charges	10,000	
	Over-valuation of stock in cost book	29,160	(1,59,160)
	Profit as per Financial Records		**12,90,000**

4. (a) HOTEL IREVNA INN, has a capacity of 200 single rooms and 40 double rooms. The average occupancy of both single and double rooms is expected to be 80% throughout the year of 365 days. The rent for double room has been fixed at 125% of the rent of a single room. The costs are as under:

Variable Costs :	**Single Rooms**	**₹ 110 each per day**
	Double Rooms	**₹ 175 each per day**
Fixed Costs:	**Single Rooms**	**₹ 60 each per day**
	Double Rooms	**₹ 125 each per day**

Required:
Calculate the rent chargeable for each single room and double room per day in such a way that the hotel earns a margin of safety of 20% on rent of rooms. **[7]**

Answer: (a)

Occupancy (Number of room days in a year):

Nature of Room	Occupancy
Single Rooms	200 × 365 × 80% = 58,400 Room days

Double Rooms 40 × 365 × 80% = 11,680 Room days

Computation of Total Cost:

Variable Costs:	Amount (₹)	Amount (₹)
Single Rooms (58,400 Room days × ₹ 110)	64,24,000	
Double Rooms (11,680 Room days × ₹ 175)	20,44,000	84,68,000
Fixed Costs:		
Single Rooms (58,400 Room days × ₹ 60)	35,04,000	
Double Rooms (11,680 Room days × ₹ 125)	14,60,000	49,64,000
Total Costs		1,34,32,000

Computation of Total Revenue:

Margin of safety 20%, Break Even Point 80%
Sales at BEP = Total Cost = ₹ 1,34,32,000
Total Revenue = ₹ 1,34,32,000 / 0.80 = ₹ 1,67,90,000

Computation of Notional Single Rooms Day:

Single Rooms (58,400 × 1) = 58,400
Double Rooms (11,680 × 1.25) = 14,600
Total: 73,000

Computation of Room Rent:

Rent per day per Single Room = ₹ 1,67,90,000 / 73,000 = ₹ 230
Rent per day per Double Room = ₹ 230 × 1.25 = ₹ 287.50

(b) OMEGA LTD undertook a contract for the construction of a building at a contract price of ₹ 45,00,000. During the first year, the following amounts were spent against which a sum of ₹ 16,87,500 (representing 90% of the work certified) was received by the contractor:

	₹
Materials used	**7,87,500**
Wages paid to the workers	**4,50,000**
Overhead expenses	**1,12,500**

During the second year, the contractor spent the following amounts:

	₹
Materials used	**11,25,000**
Wages paid to the workers	**9,00,000**
Overhead expenses	**2,25,000**

In the second year, the contract was completed and a sum of Rs.26,25,000 was received by the contractor.
Prepare the Contract Account and the Contractee Account for both the years and calculate the profits.

[7]

Answer:

(b) Contract Account

(At the end of 1st Year)

Dr. **Cr.**

Particulars	₹	Particulars	₹
To Materials Used	7,87,500	By Work-in-Progress (16,87,500 / 0.90)	18,75,000
To Wages Paid	4,50,000		
To Overhead Expenses	1,12,500		
To Notional Profit c/d	5,25,000		-
	18,75,000		18,75,000
To Profit & Loss A/c (5,25,000 x 1/3 x 90%)	1,57,500	By Notional Profit b/d	5,25,000
To Work-in- Progress (Reserve)	3,67,500		
	5,25,000		5,25,000

Contractee Account

Dr. **Cr.**

Particulars	₹	Particulars	₹
To Balance c/d	16,87,500	By Bank A/c	16,87,500
	16,87,500		16,87,500

Contract Account

(On completion of Contract in the 2nd Year)

Particulars	₹	Particulars	₹
To Work-in-Progress (Rs. 18,75,000 - Rs 3,67,500)	15,07,500	By Contractee Account	45,00,000
To Materials Used	11,25,000		
To Wages Paid	9,00,000		
To Overhead Expenses	2,25,000		
To Profit & Loss A/c (Transfer)	7,42,500		-
	45,00,000		45,00,000

Contractee Account

Particulars	₹	Particulars	₹
To Contract A/c	45,00,000	By Balance b/d	16,87,500
		By Bank A/c	26,25,000
		By Balance c/d	1,87,500
	45,00,000		45,00,000

5. (a) "Super Bite" is a leading product in the confectionery market which is obtained after it has gone through three distinct processes - X, Y and Z. The following information is obtained from cost records of Super (India) Ltd. for the month of July, 2024:

Particulars	Process X	Process Y	Process Z
Input of raw materials @₹30 per unit (units)	1,000	-	-
Other materials (₹)	26,000	19,800	29,620
Direct wages (₹)	20,000	30,000	40,000
Normal loss of input	5%	10%	15%
Output (units)	950	840	750
Sale of scrap per unit (2)	20	40	50

Total overheads are ₹90,000 which are recovered at 100% of wages.

Required:

Prepare different Process Accounts of the firm for July 2024. **[7]**

Answer:

Process X Account

Dr. **Cr.**

Particulars	Units	₹	Particulars	Units	₹
To Input of raw materials	1,000	30,000	By Normal wastage	50	1,000
To Other Materials		26,000	By Process Y A/c	950	95,000
To Direct Wages		20,000			
To Overheads		20,000			
	1,000	96,000		1,000	96,000

Process Y Account

Dr. **Cr.**

Particulars	Units	₹	Particulars	Units	₹
To Process X A/c	950	95,000	By Normal Wastage	95	3,800
To Other materials		19,800	By Abnormal Wastage	15	3,000
To Direct wages		30,000	By Process Z A/c	840	1,68,000
To Overheads		30,000			
	950	1,74,800		950	1,74,800

Process Z Account

Dr. **Cr.**

Particulars	Units	₹	Particulars	Units	₹
To Process Y A/c	840	1,68,000	By Normal Wastage	126	6,300
To Other materials		29,620	By Finished stock A/c	750	2,85,000
To Direct wages		40,000			
To Overheads		40,000			
To Abnormal gain	36	13,680			
	876	2,91,300		876	2,91,300

(b) ANKRITI LTD. manufactures product X and product Y during the year ending on 31st March, 2025. It is expected to sell 7500 kg of product X and 37500 kg of product Y @ Rs. 60 and Rs. 32 per kg respectively.

The direct materials A, B and C are mixed in the proportion of 4:4:2 in the manufacture of Product X and in the proportion of 3:5:2 in the manufacture of product Y. The actual and budget inventories for the year are as follows:

Particulars	Opening Stock (kg)	Expected Closing Stock (kg)	Anticipated Cost per kg (₹)
Material A	**3000**	**2400**	**10**
Material B	**2500**	**5800**	**8**
Material C	**16000**	**17300**	**6**
Product X	**1500**	**2000**	**—**
Product Y	**3000**	**3500**	**—**

Required:

Prepare the Production Budget and Materials Budget showing the purchase cost of materials for the year ending 31st March, 2025. **[7]**

Answer:

(b)

Production Budget for the Year ending 31st March 2025

Particulars	Product – X (kgs.)	Product – Y (kgs.)
Sales	7,500	37,500
Add: Closing Stock	2,000	3,500
Sub-total	9,500	41,000
Less: Opening tock	1,500	3,000
Production	8,000	38,000

Materials Purchase Budget
(for the year ending 31st March 2025)

Particulars	A	B	C	Total
Materials required for product-X in the ratio of 4:4:2	3,200	3,200	1,600	8,000
Materials required for product-Y in the ratio of 3:5:2	11,400	19,000	7,600	38,000
Total requirement	14,600	22,200	9,200	
Add: Closing Stock	2,400	5,800	17,300	
	17,000	28,000	26,500	
Less: Opening Stock	3,000	2,500	16,000	
Purchases (Kgs)	14,000	25,500	10,500	
Cost per Kg (₹)	10	8	6	
Total Purchase Cost (₹)	1,40,000	2,04,000	63,000	4,07,000

6. The standard material inputs required for 1,000 kgs. of a finished product are given below:

Material	Quantity (in kg)	Standard rate per kg. (in ₹)
P	450	20
Q	400	40
R	250	60
	1,100	
Standard loss	100	
Standard output	1,000	

Actual production in a period was 20,000 kgs. of the finished product for which the actual quantities of material used and the prices paid thereof, are as under:

Material	Quantity (in kgs)	Standard rate per kg. (in ₹)
P Q	10,000	19
R	8,500	42
	4,500	65

Calculate:

(i) Material Cost Variances;

(ii) Material Price Variance;

(iii) Material Usage Variance;

(iv) Material Mix Variance;

(v) Material Yield Variance.

Prepare a reconciliation among the variances. **[14]**

Answer:

For Material Cost Variances:

M1-Acutal cost of material used (AQ x AR)			
	Actual Qty. (AQ) (kg.)	Actual Rate (AR) (₹)	Amount (₹)
P	10,000	19	1,90,000
Q	8,500	42	3,57,000
R	4,500	65	2,92,500
			8,39,500

M2- Standard cost of material used (AQ x SR)			
	Actual Qty. (AQ) (kg.)	Standard Rate (SR) (₹)	Amount (₹)
P	10,000	20	2,00,000
Q	8,500	40	3,40,000
R	4,500	65	2,70,000
			8,10,000

M3- Standard cost of material if it had been used in standard proportion				
	Standard Proportion		Standard Rate	Amount
P	23,000 x 450/1,100	X	20	1,88,182
Q	23,000 x 400/1,100	X	40	3,34,545
R	23,000 x 250/1,100	X	60	3,13,636
				8,36,363

M4- Standard cost of output (SQ X SR)				
	Standard Qty. for 20,000kg		Standard Rate	Amount
P	450 x 20 = 9000	X	20	1,80,000
Q	400 x 20 = 8,000	X	40	3,20,000
R	250 x 20 = 5,000	X	60	3,00,000
				8,00,000

Calculation of Variance:

Material Price Variance	= M1-M2	=₹ 8,39,500 - ₹ 8,10,000	= ₹ 29,500 (A)
Material Mix Variance	= M2-M3	= ₹ 8,10,000 – ₹ 8,36,363	= ₹ 26,363 (F)
Material Yield Variance	= M3-M4	=₹ 8,36,363 – ₹ 8,00,000	= ₹ 36,363 (A)
Material Usage Variance	= M2-M4	= ₹ 8,10,000 - ₹ 8,00,000	= ₹ 10,000 (A)
Material Cost Variance	= M1-M4	=₹ 8,39,500 - ₹ 8,00,000	= ₹ 39,500 (A)

Reconciliation

Material Usage Variance	=	Material Mix Variance + Material Yield Variance
	=	₹ 26,363(F) + 36,363 (A)
	=	₹ 10,000 (A)
Material Cost Variance	=	Material Price Variance + Material usage
	=	Variance
		₹ 39,500 (A)

7. (a) Prepare the following information to show to management:

(i) The marginal product cost and the contribution per unit

(ii) The total contribution and profits resulting from each of the following sales mix results:

Particulars	Product	Per unit
Direct Materials	A	10
Direct Materials	B	9
Direct Wages	A	3
Direct Wages	B	2

Fixed Expenses - ₹ 800

Variable expenses are allotted to products at 100% of Direct Wages

Sales Price A ₹ 20

Sales Price B ₹ 15

Sales Mixtures:

(a) 100 units of Product A and 200 units of Product B

(b) 150 units of Product A and 150 units of Product B

(c) 200 units of Product A and 100 units of Product B **[7]**

Answer:

Statement showing Marginal Product Cost and Contribution per unit

Sl. No.	Particulars	Product A (₹)	Product B (₹)
i.	Selling Price per unit	20.00	15.00
ii.	Variable Cost		
	Direct Material cost per unit	10.00	9.00
	Direct Wages cost per unit	3.00	2.00
	Variable Expenses (100% of Direct Wages)	3.00	2.00
	Marginal Product Cost	16.00	13.00
iii.	Contribution per unit (i. – ii.)	4.00	2.00

Computation of Profit under Sales Mix (a)

Sl. No.	Particulars	Product A (₹)	Product B (₹)	Total (₹)
i.	No. of units	100	200	
ii.	Contribution per unit	4.00	2.00	
iii.	Total Contribution (i. × ii.)	400	400	800
iv.	Fixed Cost			800
v.	Profit (iii. – iv.)			Nil

Computation of Profit under Sales Mix (b)

Sl. No.	Particulars	Product A (₹)	Product B (₹)	Total (₹)
i.	No. of units	150	150	
ii.	Contribution per unit	4.00	2.00	
iii.	Total Contribution (i. × ii.)	600	300	900
iv.	Fixed Cost			800
v.	Profit (iii. – iv.)			100

Computation of Profit under Sales Mix (c)

Sl. No.	Particulars	Product A (₹)	Product B (₹)	Total (₹)
i.	No. of units	200	100	
ii.	Contribution per unit	4.00	2.00	
iii.	Total Contribution (i. × ii.)	800	200	1,000
iv.	Fixed Cost			800
v.	Profit (iii. – iv.)			200

(b) Describe the disclosures to be made as per CAS 3. **[7]**

Answer:

(b) Disclosures to be made as per CAS 3:

The cost statements shall disclose the following:

1. The basis of assignment of Production or Operation Overheads to the cost objects
2. Production or Operation Overheads incurred in foreign exchange
3. Production or Operation Overheads relating to resources received from or supplied to related parties
4. Any Subsidy, Grant, Incentive or any amount of similar nature received or receivable reduced from Production or Operation Overheads

5. Credits or recoveries relating to the Production or Operation Overheads
6. Any abnormal cost not forming part of the Production or Operation Overheads
7. Any unabsorbed Production or Operation Overheads

Disclosures shall be made only where material, significant and quantifiable.

8. (a) Explain the Responsibility centre? Classify the different types of Responsibility Centre? [4]

(b) Discuss the Bills of Materials? Examine the basic purposes of preparing a Bills of Material? [5]

(c) Summarize the objectives and scope of Cost Accounting Standard (CAS) - 5 on determination of Average (Equalized) Cost of Transportation. [5]

Answer:

(a) <u>Responsibility Centre:</u>

CIMA official terminology defines responsibility centre as departmental or organisational function whose performance is the direct responsibility of a specific manager. Responsibility centre refers to a particular segment or unit of an organisation for which a particular manager, employee, or department is held responsible and accountable for its business goals and objectives. It refers to the part of company where a manager has authority and responsibility. A responsibility centre is a functional entity within a business that tends to have its own goals and objectives, policies and procedures, thereby giving managers specific responsibility for revenues, expenses incurred, funds invested, etc.

Types of Responsibility Centres:

(i) Cost Centre – Under this center, the manager is held responsible only for the costs, including a production department, maintenance department, human resource department, etc.

(ii) Profit Centre – Under this center, the manager is responsible for all costs and revenues. Here, the manager would have all the responsibility to make decisions that would affect both the revenue and costs.

(iii) Revenue Centre–This segment is primarily responsible for attaining sales revenue. The performance of this center is evaluated by comparing the actual revenue attained with the budgeted revenue.

(iv) Investment Centre – Apart from looking into the profits, this center looks into returns on the funds invested in the group's operations. Thus, investment center is also a profit center with additional responsibilities for capital investment and possibly for financing, and whose performance is measured by its return on investment

(b) Bill of Material: Bill of Material is a complete schedule of parts and materials required for a particular order prepared by the drawing office and issued together with necessary blue prints of drawings. For standard products, printed copies of material bill are kept with blank spaces for any special details of modification to be filled in for a particular job/order. The schedule details everything, even to bolts and nuts, sizes and weights

Purpose of Bill of Material:

(i) It provides a quantitative estimate of budget of material required for a given job, process or operation which might be used for control purposes.

(ii) It substitutes material requirements and expedite issue of materials.

(iii) The store keeper can draw up a program of material purchases and issue for a given period.

(iv) It provides the basis for charging material cost to the respective job/process.

(c) 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