

**(GI-2, GI-6, GI-7, VI-1, VDI-1, DRIVE & FMT)**

DATE: 01.08.2023

MAXIMUM MARKS: 100

TIMING: 3¼ Hours

**COST AND MANAGEMENT ACCOUNTING**

Answer to questions are to be given only in English except in the case of candidates who have opted for Hindi Medium. If a candidate who has not opted for Hindi Medium. His/her answer in Hindi will not be valued.

Question No. 1 is compulsory.

Candidates are also required to answer any Four questions from the remaining Five Questions.

In case, any candidate answers extra question(s)/sub-question(s) over and above the required number, then only the requisite number of questions first answered in the answer book shall be valued and subsequent extra question(s) answered shall be ignored.

Wherever necessary, suitable assumptions may be made and disclosed by way of note.

Answer 1:

(a) (i) & (ii) Calculation of Sales value and Selling price per unit of Monkey Pox vaccine

Particulars	Amount (Rs.) per Batch	Amount (Rs.) for 1600 units or 20 batches	Amount (Rs.) per unit	
Direct materials	4,250	85,000	53.125	{1/2 M}
Direct wages	500	10,000	6.250	{1/2 M}
Lab set-up cost	1,400	28,000	17.500	{1/2 M}
Production overheads (20% of direct wages)	100	2,000	1.250	{1/2 M}
Production Cost	6,250	1,25,000	78.125	{1/2 M}
Selling, distribution and administration cost (20% of Production cost)	1,250	25,000	15.625	{1/2 M}
Total Cost	7,500	1,50,000	93.75	
Add: Profit (1/3rd of Total cost or 25% of Sales value)	2,500	50,000	31.25	
<b>Sales value</b>	10,000	{1 M} 2,00,000	125.00	{1 M}

Answer:

(b)

Particulars	Vehicle loan Applications (Rs.)	Education loan Application (Rs.)	Total (Rs.)	
Employee Cost	2,00,000 (Rs. 50,000 × 4)	1,40,000 (Rs. 70,000 × 2)	3,40,000	
Apportionment of Branch manager's salary	27,000	27,000	54,000	
Legal charges, Printing & stationery and Advertising expenses	18,000	18,000	36,000	
Other expenses	3,000	3,000	6,000	
<b>Total cost</b>	{1 M} 2,48,000	1,88,000	4,36,000	{1 M}

(i) **Computation of cost of processing a vehicle loan application:**

Total Cost ÷ No. of applications

Rs. 2,48,000 ÷ 496 = Rs. 500 {1 M}

**(ii) Computation of no. of Education loan Processed**

Total Cost = No. of applications × Processing cost per application }{1 M}

Rs. 1,88,000 = No. of applications × Rs. 500

No. of education loan applications = Rs. 1,88,000 ÷ Rs. 500 = 376 }{1 M}  
applications

**Answer:**

**(c) (i) Calculation of Economic Order Quantity**

Annual requirement (A) = 7500 × 12 = 90,000 Valves

Cost per order (O) = Rs. 15

Inventory carrying cost (i) = 20%

Cost per unit of spare (c) = Rs. 1.5

Carrying cost per unit (i × c) = Rs. 1.5 × 20% = Rs. 0.30

$$\begin{aligned} \text{Economic Order Quantity (EOQ)} &= \sqrt{\frac{2 \times A \times O}{i \times c}} \\ &= \sqrt{\frac{2 \times 90,000 \times 15}{0.3}} = 3,000 \text{ Valves } \{1^{1/2} \text{ M}\} \end{aligned}$$

Frequency of order or Number of Orders = 90,000/3,000 = 30 orders.

So Order can be placed in every 12 (360 days/30) days

Carrying cost is 20% of Rs. 4.50 = Rs. 0.90 }{1 M}

(ii) Re-order Quantity = {Maximum Consumption X Maximum lead time} +  
safety Stock  
= {7500 X 1.5} + 3200 = 14,450 Valves }{1 M}

(iii) Calculation of Economic Order Quantity if valve costs Rs. 4.50  
Carrying cost is 20% of Rs. 4.50 = Rs. 0.90

$$\begin{aligned} \text{Economic Order Quantity (EOQ)} &= \sqrt{\frac{2 \times A \times O}{i \times c}} \\ &= \sqrt{\frac{2 \times 90,000 \times 15}{0.9}} \\ &= 1732.0508 \text{ units or } 1733 \text{ Valves } \{1^{1/2} \text{ M}\} \end{aligned}$$

**Answer:**

**(d) (i) Calculation of BEP in value**

$$\text{P/V ratio} = \frac{\text{Sales price} - \text{Variable Cost}}{\text{Sales}} = \frac{300 - 180}{300} = 40\% \{1 \text{ M}\}$$

$$\text{Break Even Point in Value (₹)} = \frac{\text{Fixed Cost}}{\text{P/V ratio}} = \frac{16,80,000}{40\%} = ₹ 42,00,000 \{1/2 \text{ M}\}$$

$$\text{Break Even Point in Units} = \frac{\text{Fixed Cost}}{\text{Contribution}} = \frac{16,80,000}{120} = 14,000 \text{ Units } \{1/2 \text{ M}\}$$

$$\text{(Alternatively, } \frac{₹ 42,00,000}{300} = 14000 \text{ units)}$$

(ii) **Margin of safety (In Amount)** =  $\frac{\text{Profit}}{\text{P/V ratio}} = \frac{7,20,000}{40\%} = ₹ 18,00,000 \{1/2 \text{ M}\}$

Margin of safety may also be calculated by deducting BEP sales from present sale.  
Present sale is ₹ 60,00,000 i.e. (16,80,000 + 7,20,000)/40%.

$$\text{Margin of safety (In units)} = \frac{\text{Profit}}{\text{Contribution per unit}} = \frac{7,20,000}{120} = 6,000 \text{ units } \{1/2 \text{ M}\}$$

(iii) Profit when sales are 24,000 units

Particular	(Rs.)
Contribution (24,000 × 120)	28,80,000
Less: Fixed cost	16,80,000
Profit	12,00,000

{1 M}

(iv) Sales in value to earn a net profit of Rs. 10,00,000

$$\frac{\text{Fixed Cost} + \text{Desired profit}}{\text{P/V Ratio}} = \frac{16,80,000 + 10,00,000}{40\%} = ₹ 67,00,000 \quad \{1 M\}$$

**Answer 2:**

(a) No. of bags manufactured = 1,000 units

**Cost sheet for the month of September 2021**

	Particulars	Total Cost (Rs.)	Cost per unit (Rs.)
1.	Direct materials consumed:		
	- Leather sheets	3,20,000	320.00
	- Cotton cloths	15,000	15.00
	Add: Freight paid on purchase	8,500	8.50
	(i) Cost of material consumed	3,43,500	343.50
2.	Direct wages (Rs. 80 × 2,000 hours)	1,60,000	160.00
3.	Direct expenses (Rs. 10 × 2,000 hours)	20,000	20.00
4.	(ii) Prime Cost	5,23,500	523.50
5.	Factory Overheads: Depreciation on machines {(Rs. 22,00,000 × 90%) ÷ 120 months}	16,500	16.50
	Apportioned cost of factory rent	98,000	98.00
6.	(iii) Works/ Factory Cost	6,38,000	638.00
7.	Less: Realisable value of cuttings (Rs. 150 × 35 kg.)	(5,250)	(5.25)
8.	(iv) Cost of Production	6,32,750	632.75
9.	Add: Opening stock of bags	0	
10.	Less: Closing stock of bags (100 bags × Rs. 632.75)	(63,275)	
11.	(v) Cost of Goods Sold	5,69,475	632.75
12.	Add: Administrative Overheads:		
	- Staff salary	45,000	50.00
	- Apportioned rent for administrative office	12,000	13.33
13.	Add: Selling and Distribution Overheads		
	- Staff salary	72,000	80.00
	- Apportioned rent for sales office	10,000	11.11
	- Freight paid on delivery of bags	18,000	20.00
14.	(vi) Cost of Sales	7,26,475	807.19

Apportionment of Factory rent:

To factory building {(Rs. 1,20,000 ÷ 2400 sq. feet) × 1,960 sq. feet} = Rs. 98,000 {1 M}

To administrative office {(Rs. 1,20,000 ÷ 2400 sq. feet) × 240 sq. feet} = Rs. 12,000 {1 M}

To sale office {(Rs. 1,20,000 ÷ 2400 sq. feet) × 200 sq. feet} = Rs. 10,000 {1 M}

**Answer:**

(b) Variable Cost per Unit = Rs. 16

Fixed Cost per Unit = Rs. 4, Total Fixed Cost = 2,00,000 units × Rs. 4 =  
**Rs. 8,00,000 {1 M}**

Total Cost per Unit = Rs. 20

Selling Price per Unit = Total Cost + Profit = Rs. 20 + Rs. 4 = Rs. 24

Contribution per Unit = Rs. 24 - Rs. 16 = **Rs. 8 {1 M}**

- (i) Present Break-even Sales (Quantity) =  $\frac{\text{Fixed cost}}{\text{Contribution margin per unit}} = \frac{\text{Rs. 8,00,000}}{\text{Rs. 8}}$   
 = 1,00,000 units } {2 M}  
 Present Break-even Sales (Rs.) = 1,00,000 units x Rs. 24 = Rs. 24,00,000
- (ii) Present P/V Ratio =  $\frac{8}{24} \times 100 = 33.33\%$  } {2 M}
- (iii) Revised Selling Price per unit = Rs. 24 - 10% of Rs. 24 = Rs. 21.60  
 Revised Contribution per unit = Rs. 21.60 - Rs. 16 = Rs. 5.60  
 Revised P/V Ratio =  $\frac{5.60}{21.60} \times 100 = 25.926\%$   
 Revised Break-even point (Rs.) =  $\frac{\text{Fixed cost}}{\text{P/V ratio}} = \frac{8,00,000}{25.926\%} = \text{Rs. 30,85,705}$  } {2 M}  
 Or  
 Revised Break-even point (units) =  $\frac{\text{Fixed cost}}{\text{Contribution margin per unit}} = \frac{8,00,000}{5.60} = 1,42,857 \text{ units}$   
 Revised Break-even point (Rs.) = 1,42,857 units x Rs. 21.60 = Rs. 30,85,711
- (iv) Present profit = Rs. 8,00,000  
 Desired Profit = 120% of Rs. 8,00,000 = Rs. 9,60,000  
 Sales to earn a profit of Rs. 9,60,000  
 Total contribution required = 8,00,000 + 9,60,000 = Rs. 17,60,000  
 $\frac{\text{Fixed cost}}{\text{Contribution margin per unit}} = \frac{8,00,000 + 9,60,000}{5.60} = 3,14,286 \text{ units}$  } {2 M}  
 Revised sales (in Rs.) = 3,14,286 units x Rs. 21.60 = Rs. 67,88,578

**Answer 3:**

**(a) (a) Calculation of Raw Material inputs during the month:**

Quantities Entering Process	Litres	Quantities Leaving Process	Litres
Opening WIP	800	Transfer to Finished Goods	4,200
Raw material input (balancing figure)	<b>5,360</b>	Process Losses	1,800
		Closing WIP	160
	6,160		6,160

**(1.5 M Bold)**

**(b) Calculation of Normal Loss and Abnormal Loss/Gain**

	Litres
Total process losses for month	<b>1,800</b>
Normal Loss (10% input)	<b>536</b>
Abnormal Loss (balancing figure)	<b>1,264</b>

**(1/8 M each Bold)**

**(c) Calculation of values of Raw Material, Labour and Overheads added to the process:**

	Material	Labour	Overheads
Cost per equivalent unit	<b>Rs. 23.00</b>	<b>Rs. 7.00</b>	<b>Rs. 9.00</b>
Equivalent units (litre) (refer the working note)	<b>4,824</b>	<b>4,952</b>	<b>5,016</b>
Cost of equivalent units	<b>Rs. 1,10,952</b>	<b>Rs. 34,664</b>	<b>Rs. 45,144</b>
Add: Scrap value of normal loss	<b>Rs. 8,040</b>	--	--

(536 units × Rs. 15)			
Total value added	<b>Rs. 1,18,992</b>	<b>Rs. 34,664</b>	<b>Rs. 45,144</b>

**(1/8 M each Bold)**

**Workings:**

**Statement of Equivalent Units (litre):**

Input Details	Units	Output details	Units	Equivalent Production					
				Material		Labour		Overheads	
				Units	(%)	Units	(%)	Units	(%)
Opening WIP	<b>800</b>	Units completed:							
Units introduced	<b>5,360</b>	- Opening WIP	<b>800</b>	--	--	<b>240</b>	<b>30</b>	<b>320</b>	<b>40</b>
		- Fresh inputs	<b>3,400</b>	<b>3,400</b>	<b>100</b>	<b>3,400</b>	<b>100</b>	<b>3,400</b>	<b>100</b>
		- Normal loss	<b>536</b>	--	--	--	--	--	--
		- Abnormal loss	<b>1,264</b>	<b>1,264</b>	<b>100</b>	<b>1,264</b>	<b>100</b>	<b>1,264</b>	<b>100</b>
		- Closing WIP	<b>160</b>	<b>160</b>	<b>100</b>	<b>48</b>	<b>30</b>	<b>32</b>	<b>20</b>
	<b>6,160</b>		<b>6,160</b>	<b>4,824</b>		<b>4,952</b>		<b>5,016</b>	

**(1/8 M each Bold)**

**(d) Process Account for Month**

	Litres	Amount (Rs.)		Litres	Amount (Rs.)
To Opening WIP	<b>800</b>	<b>26,640</b>	By Finished goods	<b>4,200</b>	<b>1,63,800</b>
To Raw Materials	<b>5,360</b>	<b>1,18,992</b>	By Normal loss	<b>536</b>	<b>8,040</b>
To Wages	--	<b>34,664</b>	By Abnormal loss	<b>1,264</b>	<b>49,296</b>
To Overheads	--	<b>45,144</b>	By Closing WIP	<b>160</b>	<b>4,304</b>
	<b>6,160</b>	<b>2,25,440</b>		<b>6,160</b>	<b>2,25,440</b>

**(1/8 M each Bold)**

**Answer:**

**(b)**

(i) Material Cost Variance (A + B) = {(SQ × SP) – (AQ × AP)}

Rs. 3,625 = (SQ × SP) – Rs. 59,825

(SQ × SP) = Rs. 63,450

(SQ<sub>A</sub> × SP<sub>A</sub>) + (SQ<sub>B</sub> × SP<sub>B</sub>) = Rs. 63,450

(940 kg × SP<sub>A</sub>) + (705 kg × Rs.30) = Rs. 63,450

(940 kg × SP<sub>A</sub>) + Rs.21,150 = Rs. 63,450

(940 kg × SP<sub>A</sub>) = Rs. 42,300

SP<sub>A</sub> = Rs. 42,300

940 kg

**Standard Price of Material-A = Rs. 45 } (2 M Bold)**

**Working Note:**

SQ i.e. quantity of inputs to be used to produce actual output

$$= \frac{1,480 \text{ kg}}{90\%} = 1,645 \text{ kg}$$

$$SQ_A = \frac{800 \text{ kg}}{(800 + 600)} \times 1,645 \text{ kg} = 940 \text{ kg}$$

$$SQ_B = \frac{600 \text{ kg}}{(800 + 600)} \times 1,645 \text{ kg} = 705 \text{ kg}$$

(ii) Material Price Variance (A + B) = {(AQ × SP) – (AQ × AP)}

Rs. 175 = (AQ × SP) – Rs. 59,825

$$\begin{aligned}
 & (AQ \times SP) & = \text{Rs. } 60,000 \\
 & (AQ_A \times SP_A) + (AQ_B \times SP_B) & = \text{Rs. } 60,000 \\
 & (900 \text{ kg} \times \text{Rs. } 45 \text{ (from (i) above)}) \\
 & + (AQ_B \times \text{Rs. } 30) & = \text{Rs. } 60,000 \\
 & \text{Rs. } 40,500 + (AQ_B \times \text{Rs. } 30) & = \text{Rs. } 60,000 \\
 & (AQ_B \times \text{Rs. } 30) & = \text{Rs. } 19,500 \\
 & SP_A = \frac{\text{Rs. } 19,500}{650 \text{ kg}}
 \end{aligned}$$

**Actual Quantity of Material B = 650 kg. } (2 M Bold)**

$$\begin{aligned}
 \text{(iii)} \quad & (AQ \times AP) & = \text{Rs. } 59,825 \\
 & (AQ_A \times AP_A) + (AQ_B \times AP_B) & = \text{Rs. } 59,825 \\
 & (900 \text{ kg} \times AP_A) + (650 \text{ kg (from (ii) above)} \\
 & \times \text{Rs. } 32.5) & = \text{Rs. } 59,825 \\
 & (900 \text{ kg} \times AP_A) + \text{Rs. } 21,125 & = \text{Rs. } 59,825 \\
 & (900 \text{ kg} \times AP_A) & = \text{Rs. } 38,700 \\
 & AP_A = \frac{38,700}{900} = 43
 \end{aligned}$$

**Actual Price of Material-A = Rs. 43 } (2 M Bold)**

$$\begin{aligned}
 \text{(iv)} \quad & \text{Total Actual Quantity of Material-A and Material-B} \\
 & = AQ_A + AQ_B & = 900 \text{ kg} + 650 \text{ kg (from (ii) above)} \\
 & & = 1,550 \text{ kg}
 \end{aligned}$$

**Now,**

$$\text{Revised } SQ_A = \frac{800 \text{ kg}}{(800 + 600)} \times 1,550 \text{ kg} = \mathbf{886 \text{ kg}}$$

$$\text{Revised } SQ_B = \frac{600 \text{ kg}}{(800 + 600)} \times 1,550 \text{ kg} = \mathbf{664 \text{ kg}}$$

**(1 M Each Bold)**

$$\begin{aligned}
 \text{(v)} \quad & \text{Material Mix Variance (A + B)} = \{(RSQ \times SP) - (AQ \times SP)\} \\
 & = \{(RSQ_A \times SP_A) + (RSQ_B \times SP_B) - 60,000\} \\
 & = (886 \text{ kg (from (iv) above)} \times \text{Rs. } 45 \text{ (from (i) above)}) \\
 & + (664 \text{ kg (from (iv) above)} \times \text{Rs. } 30) - \text{Rs. } 60,000 \\
 & = (39,870 + 19,920) - 60,000 = \mathbf{\text{Rs. } 210 \text{ (A) } } \mathbf{\text{ } (2 M Bold)}
 \end{aligned}$$

**Answer 4:**

**(a) Journal Entries under integrated system of accounting**

	Particulars		(Rs.)	(Rs.)	
(i)	Work-in-Progress Ledger Control A/c	Dr.	3,25,000		} (2 M)
	Factory Overhead Control A/c	Dr.	1,15,000		
	To Stores Ledger Control A/c			4,40,000	
	(Being issue of Direct and Indirect materials)				
(ii)	Work-in-Progress Ledger Control A/c	Dr.	4,87,500		} (2 M)
	Factory Overhead Control A/c	Dr.	1,62,500		
	To Wages Control A/c			6,50,000	
	(Being allocation of Direct and Indirect wages)				

(iii)	Factory Overhead Control A/c	Dr.	2,50,000		(1 M)
	To Costing Profit & Loss A/c			2,50,000	
	(Being transfer of over absorption of Factory overhead)				
	Costing Profit & Loss A/c	Dr.	1,75,000		(1 M)
	To Administration Overhead Control A/c			1,75,000	
	(Being transfer of under absorption of Administration overhead)				
(iv)	Sundry Creditors A/c	Dr.	1,50,000		(2 M)
	To Cash/Bank A/c			1,50,000	
	(Being payment made to creditors)				
(v)	Cash/Bank A/c	Dr.	2,00,000		(2 M)
	To Sundry Debtors A/c			2,00,000	
	(Being payment received from debtors)				

Answer:

(b) (i) **Statement showing allocation of Joint Cost**

Particulars	B1	B2
No. of units Produced	<b>1,800</b>	<b>3,000</b>
Selling Price Per unit (Rs.)	<b>40</b>	<b>30</b>
Sales Value (Rs.)	<b>72,000</b>	<b>90,000</b>
Less: Estimated Profit (B1 -20% & B2 -30%)	<b>(14,400)</b>	<b>(27,000)</b>
Cost of Sales	<b>57,600</b>	<b>63,000</b>
Less: Estimated Selling Expenses (B1 -15% & B2 -15%)	<b>(10,800)</b>	<b>(13,500)</b>
Cost of Production	<b>46,800</b>	<b>49,500</b>
Less: Cost after separation	<b>(35,000)</b>	<b>(24,000)</b>
Joint Cost allocated	<b>11,800</b>	<b>25,500</b>

(1/4 M Each Bold)

(ii) **Statement of Profitability**

Particulars	M1 (Rs.)	B1 (Rs.)	B2 (Rs.)
Sales Value (A)	<b>4,00,000</b> (4,000 × Rs.100)	<b>72,000</b>	<b>90,000</b>
Less:- Joint Cost	<b>1,75,100</b> (2,12,400 -11,800 - 25,500)	<b>11,800</b>	<b>25,500</b>
- Cost after separation	-	<b>35,000</b>	<b>24,000</b>
- Selling Expenses (M1- 20%, B1-15% & B2-15%)	<b>80,000</b>	<b>10,800</b>	<b>13,500</b>
Profit (B)	<b>2,55,100</b>	<b>57,600</b>	<b>63,000</b>
Profit (A -B)	<b>1,44,900</b>	<b>14,400</b>	<b>27,000</b>

(1/4 M Each Bold)

Overall Profit = Rs. 1,44,900 + Rs. 14,400 + Rs. 27,000 = **Rs. 1,86,300**  
(1.25 M Underline Bold)

Answer 5:

(a) (i) Calculation of total cost for 'Professionals Protection Plus' policy

	Particulars	Amount (Rs.)	Amount (Rs.)
1.	Marketing and Sales support:		
	- Policy development cost	<b>11,25,000</b>	
	- Cost of marketing	<b>45,20,000</b>	
	- Sales support expenses	<b>11,45,000</b>	<b>67,90,000</b>
2.	Operations:		
	- Policy issuance cost	<b>10,05,900</b>	
	- Policy servicing cost	<b>35,20,700</b>	
	- Claims management cost	<b>1,25,600</b>	<b>46,52,200</b>

3.	IT Cost		<b>74,32,000</b>
4.	Support functions		
	- Postage and logistics	<b>10,25,000</b>	
	- Facilities cost	<b>15,24,000</b>	
	- Employees cost	<b>5,60,000</b>	
	- Office administration cost	<b>16,20,400</b>	<b>47,29,400</b>
	Total Cost		<b>2,36,03,600</b>

(Each Bold 1/3 M)

$$(ii) \text{ Calculation of cost per policy} = \frac{\text{Total cost}}{\text{No. of policies}} = \frac{\text{Rs. } 2,36,03,600}{528}$$

$$= \text{Rs. } 44,703.79 \text{ } \{2.5 \text{ M}\}$$

$$(iii) \text{ Cost per rupee of insured value} = \frac{\text{Total cost}}{\text{Total insured value}} = \frac{\text{Rs. } 2.36 \text{ crore}}{\text{Rs. } 1,320 \text{ crore}}$$

$$= \text{Rs. } .001787 \text{ } \{2.5 \text{ M}\}$$

**Answer:****(b) (i) Calculation of Factory overhead rate.**

If the single brand production was in operation, then

1 unit of Luxury = 3 units of Herbal = 6 units of Beauty. Therefore, the factory overhead ratio in the reverse order would be 5,000:15,000:30,000 or 1:3:6.

The overhead rate will be lowest in case of brand which will be produced in high number. Therefore, in case of Beauty soap brand, the overhead rate will be:

$$= \frac{80,000}{6 \times 6,750 + 3 \times 14,000 + 1 \times 77,500}$$

$$= \frac{80,000}{40,500 + 42,000 + 77,500}$$

$$= \frac{80,000}{1,60,000} = 0.5 \text{ } \{1/2 \text{ M}\}$$

So, the overhead rate will be:

$$\text{Luxury} = 0.5 \times 6 = \text{Rs. } 3 \text{ } \{1/2 \text{ M}\}$$

$$\text{Herbal} = 0.5 \times 3 = \text{Rs. } 1.5 \text{ } \{1/2 \text{ M}\}$$

$$\text{Beauty} = 0.5 \times 1 = \text{Rs. } 0.5 \text{ } \{1/2 \text{ M}\}$$

**(ii) Statement of Cost of Mix Soap Pvt. Ltd. for the month of June 2021:**

	Luxury (Rs.)	Herbal (Rs.)	Beauty (Rs.)	Total (Rs.)
Raw material consumed	20,000	47,000	2,40,000	3,07,000
Add: Wages paid	7,500	18,750	1,15,000	1,41,250
<b>Prime cost</b>	<b>27,500</b>	<b>65,750</b>	<b>3,55,000</b>	<b>4,48,250</b>
Add: Factory overheads	20,250	21,000	38,750	80,000
	(Rs. 3 x 6,750)	(Rs. 1.5 x 14,000)	(Rs. 0.5 x 77,500)	
<b>Works cost</b>	<b>47,750</b>	<b>86,750</b>	<b>3,93,750</b>	<b>5,28,250</b>
Add: General & administration overheads (1:1:1)	16,000	16,000	16,000	48,000
Add: Selling	9,550	17,350	78,750	1,05,650



expenses				
	(Rs. 47,750 x 0.20)	(Rs. 86,750 x 0.20)	(Rs. 3,93,750 x 0.20)	
<b>Cost of sales</b>	<b>73,300</b>	<b>1,20,100</b>	<b>4,88,500</b>	<b>6,81,900</b>
Profit (Balancing figure)	95,450	89,900	1,31,500	3,16,850
<b>Sales</b>	<b>1,68,750</b>	<b>2,10,000</b>	<b>6,20,000</b>	<b>9,98,750</b>
	(Rs. 25 x 6,750)	(Rs. 15 x 14,000)	(Rs. 8 x 77,500)	

(Each Bold = 1/2 M)

**Answer 6:**

- (a) **Just in Time (JIT) Inventory Management is also known as 'Demand pull' or 'Pull through' system of production.** In this system, production process actually starts after the order for the products is received. Based on the demand, production process starts and the requirement for raw materials is sent to the purchase department for purchase.
- It is a system of inventory management with an approach to have a zero inventories in stores. According to this approach material should only be purchased when it is actually required for production. {5 M}
- JIT is based on two principles**
- (i) Produce goods only when it is required and
  - (ii) the products should be delivered to customers at the time only when they want.

**Answer:**

(b)

S. No.	Items	Accounts
(i)	Preliminary expenses written off during the year	Financial Accounts
(ii)	Interest received on bank deposits	Financial Accounts
(iii)	Dividend, interest received on investments	Financial Accounts
(iv)	Salary for the proprietor at notional figure though not incurred	Cost Accounts
(v)	Charges in lieu of rent where premises are owned	Cost Accounts
(vi)	Rent receivables	Financial Accounts
(vii)	Loss on the sales of Fixed Assets	Financial Accounts
(viii)	Interest on capital at notional figure though not incurred	Cost Accounts
(ix)	Goodwill written off	Financial Accounts
(x)	Notional Depreciation on the assets fully depreciated for which book value is nil	Cost Accounts

{1/2 M Each Point}

**Answer:**

(c)

Business functions	Cost Driver
Research and Development	<ul style="list-style-type: none"> <li>• Number of research projects</li> <li>• Personnel hours on a project</li> <li>• Technical complexities of the project</li> </ul>
Design of products, services and procedures	<ul style="list-style-type: none"> <li>• Number of products in design</li> <li>• Number of parts per product</li> <li>• Number of engineering hours</li> </ul>
Customer Service	<ul style="list-style-type: none"> <li>• Number of service calls</li> <li>• Number of products serviced</li> <li>• Hours spent on servicing products</li> </ul>
Marketing	<ul style="list-style-type: none"> <li>• Number of advertisements</li> <li>• Number of sales personnel</li> <li>• Sales revenue</li> </ul>

{1 M}

{1 M}

{1 M}

{1 M}

Distribution	<ul style="list-style-type: none"> <li>• Number of units distributed</li> <li>• Number of customers</li> <li>• Weight of items distributed</li> </ul>	}	{1 M}
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**Answer:**

- (d) Budget Manual:** The budget manual is a booklet specifying the objectives of an organisation in relation to its strategy. The budget is made to decide how much an organisation would earn and spend and in what manner. In the budget, the organisation sets its priorities too.
- Effective budgetary planning relies on the provision of adequate information to the individuals involved in the planning process. Many of these information needs are contained in the budget manual. A budget manual is a collection of documents that contains key information for those involved in the planning process.
- CIMA London defines budget manual as, 'A document which sets out the responsibilities of the persons engaged in, the routines of, and the forms and records required for, budgetary control'.
- Contents of a budget manual:** Typical budget manual may include the following:
- (i) A statement regarding the objectives of the organisation and how they can be achieved through budgetary control;
  - (ii) A statement about the functions and responsibilities of each executive, both regarding preparation and execution of budgets;
  - (iii) Procedures to be followed for obtaining the necessary approval of budgets. The authority of granting approval should be stated in explicit terms. Whether, one two or more signatures are required on each document should be clearly stated;
  - (iv) A form of organisation chart to show who are responsible for the preparation of each functional budget and the way in which the budgets are interrelated.
  - (v) A timetable for the preparation of each budget.
  - (vi) The manner of scrutiny and the personnel to carry it out;
  - (vii) Reports, statements, forms and other record to be maintained.
  - (viii) The accounts classification to be employed. It is necessary that the framework within which the costs, revenue and other financial accounts are classified must be identical both in the accounts and budget department.
  - (ix) The reporting of the remedial action.
  - (x) The manner in which budgets, after acceptance and issuance, are to be revised or amended, these are included in budgets and on which action can be taken only with the approval of top management
  - (xi) This will prevent the formation of a 'bottleneck' with the late preparation of one budget holding up the preparation of all others.
  - (xii) Copies of all forms to be completed by those responsible for preparing budgets, with explanations concerning their completion.
  - (xiii) A list of the organization's account codes, with full explanations of how to use them.
  - (xiv) Information concerning key assumptions to be made by managers in their budgets, for example the rate of inflation, key exchange rates, etc.

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