

(GI-11, GI-12+15, GI-13+14, SI-5)
 DATE: 12.01.2020 MAXIMUM MARKS: 100 TIMING: 3¼ Hours

PAPER : COSTING

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) Calculation of Economic Order Quantity

$$EOQ = \sqrt{\frac{2AO}{C}} = \sqrt{\frac{2 \times 12,000 \text{ units} \times \text{Rs. } 1,800}{\text{Rs. } 640 \times 18.75 / 100}} = 600 \text{ units} \quad \left. \vphantom{\frac{2AO}{C}} \right\} \mathbf{1 \text{ M}}$$

(ii) Evaluation of Profitability of Different Options of Order Quantity
 When EOQ is ordered

		(Rs.)
Purchase Cost	(12,000 units x Rs. 640)	76,80,000
Ordering Cost $\left[\frac{A}{Q} \times O - \right]$	(12,000 units / 600 units) x Rs. 1,800]	36,000
Carrying Cost $\left[\frac{Q}{2} \times C \times i - \right]$	600 units x Rs. 640 x ½ x 18.75/100)	36,000
Total Cost		77,52,000

When Quantity Discount is accepted

		(Rs.)
Purchase Cost	(12,000 units x Rs. 608)	72,96,000
Ordering Cost $\left[\frac{A}{Q} \times O - \right]$	(12,000 units/3,000 units) x Rs. 1,800]	7,200
Carrying Cost $\left[\frac{Q}{2} \times C \times i - \right]$	(3,000 units x Rs. 608 x ½ Rs. 18.75/100)]	1,71,000
Total Cost		74,74,200

Advise – The total cost of inventory is higher if EOQ is adopted. If M/s. X Private Limited gets a discount of 5% on the purchases of "SKY BLUE" (if order size is 3,000 components at a time), there will be financial benefit of Rs. 2,77,800 (77,52,000 - 74,74,200). However, order size of big quantity will increase volume of average inventory to 5 times. There may be risk of shrinkage, pilferage and obsolescence etc., of inventory due to increase in the average volume of inventory holding. This aspect also has to be taken into consideration before opting the discount offer and taking final decision.

Answer:

(b) Labour turnover rate:

It comprises of computation of labour turnover by using following methods:

(i) Replacement Method:

$$\begin{aligned} \text{Labour turnover rate} &= \frac{\text{No. of workers replaced}}{\text{Average number of workers}} \times 100 \quad \left. \vphantom{\frac{\text{No. of workers replaced}}{\text{Average number of workers}}} \right\} \{1/2 \text{ M}\} \\ &= \frac{75}{1,000} \times 100 = 7.5\% \quad \left. \vphantom{\frac{75}{1,000}} \right\} \{1/2 \text{ M}\} \end{aligned}$$

$$\text{Equivalent Annual Turnover Rate} = \frac{7.5 \times 365}{31} = 88.31\% \quad \left. \vphantom{\frac{7.5 \times 365}{31}} \right\} \{1/2 \text{ M}\}$$

(ii) Separation Method:

$$\begin{aligned} \text{Labour turnover rate} &= \frac{\text{No. of workers left} + \text{No. of workers discharged}}{\text{Average number of workers}} \times 100 \quad \left. \vphantom{\frac{\text{No. of workers left} + \text{No. of workers discharged}}{\text{Average number of workers}}} \right\} \{1/2 \text{ M}\} \\ &= \frac{(40 + 60)}{(900 + 1100) \div 2} \times 100 = \frac{100}{1,000} \times 100 = 10\% \quad \left. \vphantom{\frac{(40 + 60)}{(900 + 1100) \div 2}} \right\} \{1/2 \text{ M}\} \end{aligned}$$

$$\text{Equivalent Annual Turnover Rate} = \frac{10 \times 365}{31} = 117.74\% \quad \left. \vphantom{\frac{10 \times 365}{31}} \right\} \{1/2 \text{ M}\}$$

(iii) Flux Method:

$$\begin{aligned} \text{Labour turnover rate} &= \frac{\text{No. of separations} + \text{No. of accessions}}{\text{Average number of workers}} \times 100 \quad \left. \vphantom{\frac{\text{No. of separations} + \text{No. of accessions}}{\text{Average number of workers}}} \right\} \{1 \text{ M}\} \\ &= \frac{(100 + 300)}{(900 + 1,100) \div 2} \times 100 = \frac{400}{1,000} \times 100 = 40\% \quad \left. \vphantom{\frac{(100 + 300)}{(900 + 1,100) \div 2}} \right\} \{1 \text{ M}\} \end{aligned}$$

$$\text{Equivalent Annual Turnover Rate} = \frac{40 \times 365}{31} = 470.97\% \quad \left. \vphantom{\frac{40 \times 365}{31}} \right\} \{1 \text{ M}\}$$

OR

(iii) Flux Method:

$$\begin{aligned} \text{Labour turnover rate} &= \frac{\text{No. of separations} + \text{No. of reokaced}}{\text{Average number of workers}} \times 100 \quad \left. \vphantom{\frac{\text{No. of separations} + \text{No. of reokaced}}{\text{Average number of workers}}} \right\} \{5 \text{ M}\} \\ &= \frac{100 + 75}{1000} \times 100 = 17.5\% \quad \left. \vphantom{\frac{100 + 75}{1000}} \right\} \{5 \text{ M}\} \end{aligned}$$

$$\text{Equivalent Annual Turnover Rate} = \frac{17.5 \times 365}{31} = 206.05\%$$

Answer:

(c)

	Sales (Rs.)	Profit (Rs.)
Year 2016	4,00,000	15,000 (loss)
Year 2017	5,00,000	15,000 (profit)
Difference	1,00,000	30,000

$$(i) \text{ P/V Ratio} = \frac{\text{Difference in profit}}{\text{Difference in sales}} \times 100 = \frac{30,000}{1,00,000} \times 100 = 30\% \quad \left. \vphantom{\frac{30,000}{1,00,000}} \right\} 1 \text{ M}$$

(ii)	Contribution in 2016 (4,00,000 × 30%)		(Rs.) 1,20,000	
	Add: Loss Fixed Cost*		<u>15,000</u> <u>1,35,000</u>	} 1 M
	*Contribution =		Fixed cost + Profit	
	∴ Fixed Cost =		Contribution – Profit	
(iii)	Break-even point =	$\frac{\text{Fixed cost}}{P/V \text{ ratio}} = \frac{1,35,000}{30\%} = \text{Rs. } 4,50,000$		} 1 M

(iv) Sales to earn a profit of Rs. 45,000

$$\frac{\text{Fixed cost} + \text{Desired profit}}{P/V \text{ ratio}} = \frac{1,35,000 + 45,000}{30\%} = \text{Rs. } 6,00,000$$
 } 1 M

(v) Margin of safety in 2017 – 18
 Margin of safety = Actual sales – Break-even sales
 = 5,00,000 – 4,50,000 = Rs. 50,000. } 1 M

Answer:

(d)

Reconciliation Statement

	Particulars	Rs.	Rs.
	Loss as per Cost Accounts		(2,48,300)
Add:	Works overheads over recovered	30,400	} 2 M
	Depreciation over charged in cost accounts	35,100	
	Interest credited during the year in financial accounts	7,500	
Less:	Selling overheads under recovered	20,300	} 3 M
	Administrative overheads under recovered	27,700	
	Bad debts w/off in financial accounts	15,000	
	Preliminary Exp. w/off in financial accounts	5,000	
	Loss as per Financial Accounts		(2,43,300)

Answer 2:

(a)

The total production overheads are Rs. 26,00,000:

Product A: 10,000 × Rs. 30 = Rs. 3,00,000

Product B: 20,000 × Rs. 40 = Rs. 8,00,000

Product C: 30,000 × Rs. 50 = Rs. 15,00,000

On the basis of ABC analysis this amount will be apportioned as follows:

Statement Showing "Activity Based Production Cost"

Activity Cost Pool	Cost Driver	Ratio	Total Amount (Rs.)	A (Rs.)	B (Rs.)	C (Rs.)
Stores	Purchase	6:9:10	2,96,000	71,040	1,06,560	1,18,400
Receiving	Requisition					
Inspection	Production Runs	5:7:8	8,94,000	2,23,500	3,12,900	3,57,600
Dispatch	Orders Executed	6:9:10	2,10,000	50,400	75,600	84,000
Machine	Setups	12:13:15	12,00,000	3,60,000	3,90,000	4,50,000
Setups						
Total Activity Cost				7,04,940	8,85,060	10,10,000
Quantity Produces				10,000	20,000	30,000
Unit Cost (Overheads)				70.49	44.25	33.67
Add: Conversion Cost (Material + Labour)				80	80	90
Total				150.49	124.25	123.67

Answer:

(b) Calculation of Cost of Production and Profit for the month ended April 2018:

Particulars	Amount (Rs.)	Amount (Rs.)	
Materials consumed:			
- Opening stock	6,06,000		
- Add: Purchases	28,57,000		
	34,63,000		
- Less: Closing stock	(7,50,000)	27,13,000	} 2 M
Direct wages		37,50,000	
Prime cost		64,63,000	
Factory expenses		21,25,000	
		85,88,000	
Add: Opening W-I-P		12,56,000	
Less: Closing W-I-P		(14,22,000)	
Factory cost		84,22,000	} 2 M
Less: Sale of scrap		(26,000)	
Cost of Production		83,96,000	
Add: Opening stock of finished goods		3,59,000	
Less: Closing stock of finished goods		3,09,000	
Cost of Goods Sold		84,46,000	} 2 M
Office and administration expenses		10,34,000	
Selling and distribution expenses		7,50,000	
Cost of Sales		1,02,30,000	} 2 M
Profit (balancing figure)		31,70,000	
Sales		1,34,00,000	} 2 M

Answer 3:

(a)

Cost Ledger Control Account

Particulars	(Rs.)	Particulars	(Rs.)	
To Store Ledger Control A/c	11,000	By Opening Balance	7,00,000	} 2 M
To Balance c/d	9,84,600	By Store ledger control A/c	1,36,000	
		By Manufacturing Overhead Control A/c	91,000	
		By Wages Control A/c	68,600	
	9,95,600		9,95,600	

Stores Ledger Control Account

Particulars	(Rs.)	Particulars	(Rs.)	
To Opening Balance	3,20,000	By WIP Control A/c	1,26,000	} 1 M
To Cost ledger control A/c	1,36,000	By Cost ledger control A/c (Returns)	11,000	
		By Balance c/d	3,19,000	
	4,56,000		4,56,000	

WIP Control Account

Particulars	(Rs.)	Particulars	(Rs.)	
To Opening Balance	1,52,000	By Finished Stock Ledger Control A/c	2,35,500	} 2 M
To Wages Control A/c	48,000	By Balance c/d	1,76,500	
To Stores Ledger Control A/c	1,26,000			
To Manufacturing Overhead Control A/c	86,000			
	4,12,000		4,12,000	

Finished Stock Ledger Control Account

Particulars	(Rs.)	Particulars	(Rs.)
To Opening Balance	2,56,000	By Cost of Sales	1,68,000
To WIP Control A/c	2,35,500	By Balance c/d	3,31,500
To Cost of Sales A/c (Sales Return)	8,000		
	4,99,500		4,99,500

1 M

Manufacturing Overhead Control Account

Particulars	(Rs.)	Particulars	(Rs.)
To Cost Ledger Control A/c	91,000	By Opening Balance	28,000
To Wages Control A/c	20,600	By WIP Control A/c	86,000
To Over recovery c/d	2,400		
	1,14,000		1,14,000

1 M

Wages Control Account

Particulars	(Rs.)	Particulars	(Rs.)
To Transfer to Cost Ledger Control A/c	68,600	By WIP Control A/c	48,000
		By Manufacturing Overhead Control A/c	20,600
	68,600		68,600

1 M

Cost of Sales Account

Particulars	(Rs.)	Particulars	(Rs.)
To Finished Stock Ledger Control A/c	1,68,000	By Finished Stock Ledger Control A/c (Sales return)	8,000
		By Balance c/d	1,60,000
	1,68,000		1,68,000

1 M

Trial Balance

	(Rs.)	(Rs.)
Stores Ledger Control A/c	3,19,000	
WIP Control A/c	1,76,500	
Finished Stock Ledger Control A/c	3,31,500	
Manufacturing Overhead Control A/c	--	2,400
Cost of Sales A/c	1,60,000	
Cost ledger control A/c	--	9,84,600
	9,87,000	9,87,000

1 M

Answer:

(b)

Process- I Account

Particulars	Total (Rs.)	Cost (Rs.)	Profit (Rs.)	Particulars	Total (Rs.)	Cost (Rs.)	Profit (Rs.)
Opening stock	7,500	7,500	--	Process- II A/c	54,000	40,500	13,500
Direct materials	15,000	15,000	--				
Direct wages	11,200	11,200	--				
	33,700	33,700	--				
Less: Closing stock	(3,700)	(3,700)					
Prime cost	30,000	30,000	--				
Overheads	10,500	10,500	--				
Process cost	40,500	40,500	--				

3 M

Profit (331/3 of total cost)	13,500	--	13,500				
	54,000	40,500	13,500		54,000	40,500	13,500

Process- II Account

Particulars	Total (Rs.)	Cost (Rs.)	Profit (Rs.)	Particulars	Total (Rs.)	Cost (Rs.)	Profit (Rs.)
Opening stock	9,000	7,500	1,500	Finished Stock A/c	1,12,500	75,750	36,750
Transferred from	54,000	40,500	13,500				
Process- I							
Direct materials	15,750	15,750	--				
Direct wages	11,250	11,250	--				
	90,000	75,000	15,000				
Less Closing stock*	(4,500)	(3,750)	(750)				
Prime cost	85,500	71,250	14,250				
Overheads	4,500	4,500	--				
Process cost	90,000	75,750	14,250				
Profit (25% on total cost)	22,500	--	22,500				
	1,12,500	75,750	36,750		1,12,500	75,750	36,750

3 M

* Cost of Closing Stock = $\frac{\text{Rs. } 75,000}{\text{Rs. } 90,000} \times \text{Rs. } 4,500 = \text{Rs. } 3,750$

Finished Stock Account

Particulars	Total (Rs.)	Cost (Rs.)	Profit (Rs.)	Particulars	Total (Rs.)	Cost (Rs.)	Profit (Rs.)
Opening stock	22,500	14,250	8,250	Costing	1,40,000	82,425	57,575
Process- II	1,12,500	75,750	36,750	P&L A/c			
	1,35,000	90,000	45,000				
Less: Closing stock*	(11,250)	(7,575)	(3,675)				
Finished stock	1,23,750	82,425	41,325				
Profit	16,250	--	16,250				
	1,40,000	82,425	57,575		1,40,000	82,425	57,575

3 M

* Cost of Closing Stock = $\frac{\text{Rs. } 75,750}{\text{Rs. } 1,12,500} \times \text{Rs. } 11,250 = \text{Rs. } 7,575$

Working Notes:

Let the transfer price be 100 then profit is 25; i.e. cost price is Rs. 75.

- If cost is Rs. 75 then profit is Rs. 25
 If cost is Rs. 40,500 then profit is $\frac{25}{75} \times \text{Rs. } 40,500 = \text{Rs. } 13,500$ } 1/2 M
- If cost is Rs. 80 then profit is Rs. 20
 If cost is Rs. 90,000 then profit is $\frac{20}{80} \times \text{Rs. } 90,000 = \text{Rs. } 22,500$ } 1/2 M

Answer 4:

(a)

Working Note:

- Total Kilometres run per annum:
 = Number of Buses × Distance × Number of days in the Month × Number of trips × 12 months
 = 1 Bus × 40 kms × 25 Days × 6 Single trips (3 Round Trips) × 12 months = 72,000 kms. } 1 M
- Total Passenger Kilometres per annum:

- Total Kilometres run per annum × Seating Capacity
 = 72,000 Kms × 40 Seats = 28,80,000 Passenger-Kms. } **1 M**
- (3) Petrol & oil Consumption per annum:
 Total Kilometres run per annum × Petrol Consumption per KM
 = 72,000 Kms × (Rs. 500 / 100 Kms) = Rs. 3,60,000 } **1 M**

Statement of Cost per Passenger – Km

	Particulars	Per Annum	Per Passenger - Kilometer
A.	Standing Charges:		
	Insurance @ 1.5% on Rs. 20,00,000	30,000	
	Annual Tax	20,000	
	Garage rent (Rs. 20,000 × 12)	2,40,000	
	Depreciation	4,00,000	
	Salary of Driver (fixed part)	3,60,000	
	Salary of Conductor (fixed part)	3,00,000	
	Stationary	12,000	
	Manager-cum-accountant's salary	2,04,000	
	Total Standing Charges	15,66,000	0.5438
B.	Running Charges:		
	Diesel and other Oil (WN-3)	3,60,000	
	Commission to Driver* (10%×Rs. 28,40,000×1/2)	1,42,000	
	Commission to Conductor* (10%×Rs. 28,40,000×1/2)	1,42,000	
	Total Running Charges	6,44,000	0.2236
C.	Maintenance Charges:		
	Repairs	2,04,000	0.0708
	Grand Total (A+B+C)	24,14,000	0.8382
	Profit (15%×Rs. 28,40,000)	4,26,000	0.1479
	Fare per Passenger Kilometer		0.9861

*Total takings = Standing Charges + (Running cost + Commission on takings)
 + Maintenance cost + Profit

Let Takings = X

Or, X = 15,66,000 + (3,60,000 + 0.1X) + 2,04,000 + 0.15X

Or, X - 0.25X = 21,30,000

Or, X = 28,40,000 } **1 M**

Answer:

(b) Material Variances:

Material	SQ (WN-1)	SP (Rs.)	SQ × SP (Rs.)	RSQ (WN-2)	RSQ × SP (Rs.)	AQ	AQ × SP (Rs.)	AP (Rs.)	AQ × AP (Rs.)
A	940 kg.	45.00	42,300	886 kg.	39,870	900 kg.	40,500	43.00	38,700
B	705 kg.	30.00	21,150	664 kg.	19,920	650 kg.	19,500	32.50	21,125
	1645 kg.		63,450	1550 kg.	59,790	1550 kg.	60,000		59,825

WN-1: Standard Quantity (SQ)

Material A- $\left(\frac{800kg.}{0.9 \times 1,400kg.} \times 1,480kg. \right) = 939.68 \text{ or } 940 \text{ kg.}$

Material B- $\left(\frac{600kg.}{0.9 \times 1,400kg.} \times 1,480kg. \right) = 704.76 \text{ or } 705kg.$

WN- 2: Revised Standard Quantity (RSQ):

$$\text{Material A-} \quad \left(\frac{800\text{kg.}}{1,400\text{kg.}} \times 1,550\text{kg.} \right) = 885.71 \text{ or } 886 \text{ kg.}$$

$$\text{Material B-} \quad \left(\frac{600\text{kg.}}{1,400\text{kg.}} \times 1,550\text{kg.} \right) = 664.28 \text{ or } 664 \text{ kg.}$$

$$\begin{aligned} \text{(i) Material Cost Variance (A + B)} &= \{(SQ \times SP) - (AQ \times AP)\} \\ &= \{63,450 - 59,825\} = 3,625 \text{ (F)} \end{aligned} \quad \left. \vphantom{\text{(i) Material Cost Variance (A + B)}} \right\} \mathbf{2 M}$$

$$\begin{aligned} \text{(ii) Material Price Variance (A + B)} &= \{(AQ \times SP) - (AQ \times AP)\} \\ &= \{60,000 - 59,825\} = 175 \text{ (F)} \end{aligned} \quad \left. \vphantom{\text{(ii) Material Price Variance (A + B)}} \right\} \mathbf{1 M}$$

$$\begin{aligned} \text{(iii) Material Mix Variance (A + B)} &= \{(RSQ \times SP) - (AQ \times SP)\} \\ &= \{59,790 - 60,000\} = 210 \text{ (A)} \end{aligned} \quad \left. \vphantom{\text{(iii) Material Mix Variance (A + B)}} \right\} \mathbf{2 M}$$

$$\begin{aligned} \text{(iv) Material Yield Variance (A + B)} &= \{(SQ \times SP) - (RSQ \times SP)\} \\ &= \{63,450 - 59,790\} = 3,660 \text{ (F)} \end{aligned} \quad \left. \vphantom{\text{(iv) Material Yield Variance (A + B)}} \right\} \mathbf{1 M}$$

Labour Variances:

Labour	SH (WN-3)	SR (Rs.)	SH × SR (Rs.)	RSH (WN-4)	RSH × SR (Rs.)	AH	AH × SR (Rs.)	AR (Rs.)	AH × AR (Rs.)
Skilled	1,116 hrs	37.50	41,850	1144	42,900	1,200	45,000	35.50	42,600
Unskilled	893 hrs	22.00	19,646	916	20,152	860	18,920	23.00	19,780
	2,009 hrs		61,496	2,060	63,052	2,060	63,920		62,380

WN- 3: Standard Hours (SH):

$$\text{Skilled labour-} \quad \left(\frac{0.95 \times 1,000\text{hr.}}{0.90 \times 1,400\text{kg.}} \times 1,480\text{kg.} \right) = 1,115.87 \text{ or } 1,116 \text{ hrs.}$$

$$\text{Unskilled labour-} \quad \left(\frac{0.95 \times 800\text{hr.}}{0.90 \times 1,400\text{kg.}} \times 1,480\text{kg.} \right) = 892.69 \text{ or } 893 \text{ hrs.}$$

WN- 4: Revised Standard Hours (RSH):

$$\text{Skilled labour-} \quad \left(\frac{1,000\text{hr.}}{1,800\text{hr.}} \times 2,060\text{hr.} \right) = 1,144.44 \text{ or } 1,144 \text{ hrs.}$$

$$\text{Unskilled labour-} \quad \left(\frac{800\text{hr.}}{1,800\text{hr.}} \times 2,060\text{hr.} \right) = 915.56 \text{ or } 916 \text{ hrs.}$$

$$\begin{aligned} \text{(v) Labour Cost Variance (Skilled + Unskilled)} &= \{(SH \times SR) - (AH \times AR)\} \\ &= \{61,496 - 62,380\} = 884 \text{ (A)} \end{aligned} \quad \left. \vphantom{\text{(v) Labour Cost Variance (Skilled + Unskilled)}} \right\} \mathbf{2 M}$$

$$\begin{aligned} \text{(vi) Labour Efficiency Variance (Skilled + Unskilled)} &= \{(SH \times SR) - (AH \times SR)\} \\ &= \{61,496 - 63,920\} = 2,424 \text{ (A)} \end{aligned} \quad \left. \vphantom{\text{(vi) Labour Efficiency Variance (Skilled + Unskilled)}} \right\} \mathbf{1 M}$$

$$\begin{aligned} \text{(vii) Labour Yield Variance (Skilled + Unskilled)} &= \{(SH \times SR) - (RSH \times SR)\} \\ &= \{61,496 - 63,052\} = 1,556 \text{ (A)} \end{aligned} \quad \left. \vphantom{\text{(vii) Labour Yield Variance (Skilled + Unskilled)}} \right\} \mathbf{1 M}$$

Answer 5:

(a) Contract Account for the year ended 31st March, 20X8

	(Rs. 000)		(Rs. 000)
To Material issued to site	5,000	By Material at site	1,800
To Direct wages	3,800	By Material returned	100
Add: Outstanding wages	110	By Work-in-progress:	
To Plant hire	700	- Value of work	10,000

		certified	
To Site office cost	270	- Work uncertified	230
To Direct expenses	500		
To Depreciation (special plant)	300		
To Notional profit c/d	1,450		
	12,130		12,130

Answer:

(b) Production budget of Product Minimax and Heavyhigh (in units)

	April		May		June		Total	
	MM	HH	MM	HH	MM	HH	MM	HH
Sales	8,000	6,000	10,000	8,000	12,000	9,000	30,000	23,000
Add: Closing Stock (25% of next month's sale)	2,500	2,000	3,000	2,250	4,000	3,500	9,500	7,750
Less: Opening Stock	2,000*	1,500*	2,500	2,000	3,000	2,250	7,500	5,750
Production units	8,500	6,500	10,500	8,250	13,000	10,250	32,000	25,000

*Opening stock of April is the closing stock of March, which is as per company's policy 25% of next months sale.

Production Cost Budget

Element of cost	Rate (Rs.)		Amount (Rs.)	
	MM (32,000 units)	HH (25,000 units)	MM	HH
Direct Material	220	280	70,40,000	70,00,000
Direct Labour	130	120	41,60,000	30,00,000
Manufacturing Overhead (4,00,000/ 1,80,000 × 32,000)			71,111	
(5,00,000/ 1,20,000 × 25,000)				1,04,167
			1,12,71,111	1,01,04,167

Answer 6:

(a) The essential features, which a good cost and management accounting system should possess, are as follows:

- (i) Informative and simple:** Cost and management accounting system should be tailor-made, practical, simple and capable of meeting the requirements of a business concern. The system of costing should not sacrifice the utility by introducing meticulous and unnecessary details. 1 M
- (ii) Accurate and authentic:** The data to be used by the cost and management accounting system should be accurate and authenticated; otherwise it may distort the output of the system and a wrong decision may be taken. 1 M
- (iii) Uniformity and consistency:** There should be uniformity and consistency in classification, treatment and reporting of cost data and related information. This is required for benchmarking and comparability of the results of the system for both horizontal and vertical analysis. 1 M
- (iv) Integrated and inclusive:** The cost and management accounting system should be integrated with other systems like financial accounting, taxation, statistics and operational research etc. to have a complete overview and clarity in results. 1 M
- (v) Flexible and adaptive:** The cost and management accounting system should be flexible enough to make necessary amendments and modification in the system to incorporate changes in technological, reporting, regulatory and other requirements. 1 M
- (vi) Trust on the system:** Management should have trust on the system and its output. For this, an active role of management is required for the development of such a system that reflect a strong conviction in using information for decision making. 1 M

Answer:

- (b)** Reasons for disagreement of profits as per cost and financial accounts: The various reasons for disagreement of profits shown by the two sets of books viz., cost and financial may be listed as below:
1. Items appearing only in financial accounts: The following items of income and expenditure are normally included in financial accounts and not in cost accounts. Their inclusion in cost accounts might lead to unwise managerial decisions. These items are:
 - (i) Income:
 - (a) Profit on sale of assets
 - (b) Interest received
 - (c) Dividend received
 - (d) Rent receivable
 - (e) Share Transfer fees
 - (ii) Expenditure
 - (a) Loss on sale of assets
 - (b) Uninsured destruction of assets
 - (c) Loss due to scrapping of plant and machinery
 - (d) Preliminary expenses written off
 - (e) Goodwill written off
 - (f) Underwriting commission and debenture discount written off
 - (g) Interest on mortgage and loans
 - (h) Fines and penalties
 - (iii) Appropriation
 - (a) Dividends
 - (b) Reserves
 - (c) Dividend equalization fund, Sinking fund etc.
 2. Items appearing only in cost accounts: There are some items which are included in cost accounts but not in financial account. These are:
 - (a) Notional interest on capital;
 - (b) Notional rent on premises owned.
 3. Under or over-absorption of overhead: In cost accounts overheads are charged to production at pre-determined rates where in financial accounts actual amount of overhead is charged, the difference gives rise under or over-absorption; causing a difference in profits.
 4. Different bases of stock valuation: In financial books, stocks are valued at cost or market price, whichever is lower. In cost books, however, stock of materials may be valued on FIFO or LIFO basis and work-in-progress may be valued at prime cost or works cost. Differences in store valuation may thus cause a difference between the two profits.
 5. Depreciation: The amount of depreciation charge may be different in the two sets of books either because of the different methods of calculating depreciation or the rates adopted. In company accounts, for instance, the straight line method may be adopted whereas in financial accounts it may be the diminishing balance method.

Answer:

- (c)** Cost plus contract: Under cost plus contract, the contract price is ascertained by adding a percentage of profit to the total cost of the work. Such types of contracts are entered into when it is not possible to estimate the contract cost with reasonable accuracy due to unstable condition of material, labour services etc.
- Following are the advantages of cost plus contract:
- (i) The contractor is assured of a fixed percentage of profit. There is no risk of incurring any loss on the contract.
 - (ii) It is useful specially when the work to be done is not definitely fixed at the time of making the estimate.
 - (iii) Contractee can ensure himself about the 'cost of contract' as he is empowered to examine the books and documents of the contractor to

ascertain the veracity of the cost of contract.

Answer:

(d) Distinction between Job and Batch Costing:

Sr. No	Job Costing	Batch Costing	
1	Method of costing used for non-standard and non-repetitive products produced as per customer specifications and against specific orders.	Homogeneous products produced in a continuous production flow in lots.	} 2 M
2	Cost determined for each Job	Cost determined in aggregate for the entire Batch and then arrived at on per unit basis.	
3	Jobs are different from each other and independent of each other. Each Job is unique.	Products produced in a batch are homogeneous and lack of individuality	} 1 M
