(GI-11, GI-12+15, GI-13+14, SI-5)

DATE: 22.06.2020 **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):

Cost sheet for the year ended 31st March, 2018.
Units produced - 14,000 units
Units sold - 14,153 units

Particulars	Amount (Rs.)
Raw materials purchased	42,25,000
Add: Freight Inward	1,00,000
Add: Opening value of raw materials	2,28,000
Less: Closing value of raw materials	(3,05,000)
	42,48,000
Less: Sale of scrap of material	8,000
Materials consumed	42,40,000
Direct Wages (12,56,000 + 1,50,000)	14,06,000
Prime Cost	56,46,000
Factory overheads (20% of Rs. Prime Cost)	11,29,200
Add: Opening value of W-I-P	1,92,500
Less: Closing value of W-I-P	(1,40,700)
Factory Cost	68,27,000
Add: Administrative overheads	1,73,000
Cost of Production	70,00,000
Add: Value of opening finished stock	6,08,500
Less: Value of closing finished stock [Rs. 500(70,00,000/14,000) × 1,064] (1,217+ 14,000 – 14,153 = 1,064 units)	(5,32,000)
Cost of Goods Sold	70,76,500
Distribution expenses (Rs. 16 × 14,153 units)	2,26,448
Cost of Sales	73,02,948
Profit (Balancing figure)	14,43,606
Sales (Rs. 618 × 14,153 units)	87,46,554

{5 M}

Answer (b):

(b)

		Rs.
(i)	Rowan Plan : Normal time wage = 15 hours @ Rs. 5= Bonus = Time saved /Time allowed × (Time taken × Time rate)	75

	$= \frac{5}{20} \times (5 \times 5)$	18.75
		93.75
(ii)	Halsey Plan: Normal time wage = 15 hours @ Rs. 5 =	75
	Bonus = 50% of (Time saved x Time rate) = 50% of (5x5) =	12.5
		87.5

Statement of Comparative Factory cost of work

	Rowan Plan Rs.	Halsey Plan Rs.
Materials	50	50
Direct Wages	{1 M} 93.75	{1 M} 87.5
Prime Cost	143.75	137.5
Factory Overhead (100% of Direct wages)	93.75	87.5
Factory Cost	$1\frac{1}{2}M$ 237.5	$1\frac{1}{2}M$ 225

Answer 1(c):

(a) (i) Efficiency Ratio = $\frac{Actual\ Production\ in\ terms\ of\ standard\ hours}{Actual\ hours\ worked} \times 100$

$= \frac{750 units \times 10 hours}{6{,}000} \times 100 = 125\%$ } {1½ M}

(ii) Activity Ratio = $\frac{Actual\ Production\ in\ terms\ of\ standard\ hours}{Budgeted\ production\ in\ terms\ of\ standard\ hours} \times 100$

$= \frac{7{,}500}{880 \times 10} \times 100 = 85.23\%$ } {1½ M}

(iii) Capacity Ratio = $\frac{Actual\ hours\ worked}{Maximum\ hours\ in\ a\ budget\ period} \times 100$

$= \frac{6{,}000}{8{,}800} \times 100 = 68.19\%$ } {1½ M}

Activity ratio = Efficiency Ration x Capacity Ratio
Or, 85.23% = 125% x 68.19% } {1/2 M}

Answer 1(d):

Working Notes:

1. Depreciation per annum = $\frac{Purchase\ price - Scrap\ Value}{Estimated\ life}$

$= \frac{Rs.\ 4{,}00{,}000 - Rs.\ 10{,}000}{5\ years} = Rs.\ 78{,}000$ } {1 M}

2. Total distance travelled by mini-bus in 25 days:
= Length of the route (two-sides) x No. of trips per day x No. of days
= 60 km x 6 trips x 25 days = 9,000 km } {1 M}

3. Total Passenger-Km
= Total distance travelled by mini-bus in 25 days x No. of seats } {1 M}
= 9,000 km x 20 seats = 1,80,000 passenger-km

Particulars	Cost per annum Rs.	Cost per month Rs.
Fixed expenses:		
Insurance	15,000	
Garage rent	9,000	
Road tax	3,000	
Administrative charges	5,000	
Depreciation	78,000	
Interest on loan	10,000	
	1,20,000	10,000
Running expenses:		
Repair and maintenance	15,000	1,250
Replacement of tyre-tube	3,600	300
Diesel and oil cost (9,000 km × Rs. 5)	-	45,000
Driver and conductor's salary	-	5,000
Total cost (per month)		61,550.00
Add: Profit 20% of total revenue cost or 25% of total cost		15,387.50
Total revenue		76,937.50

Rate per passenger-km Rs. 76,937.50/1,80,000 passenger km = 0.42743 i.e. = 0.43 i.e., 43 paise **{2 M}**

Answer 2(a):

Basic Data:

A	(Number of units to be purchased annually)	=	5,000 units
O	(Ordering cost per order)	=	Rs. 20
C	(Annual cost of storage per unit)	=	Rs. 5
Purchase price per unit inclusive of transportation cost		=	Rs. 50.

{2 M}

Computations:

(i) Re-ordering level (ROL) = Maximum usage per period × Maximum lead time
= 20 units per day × 15 days = 300 units

(ii) Maximum level (Refer to working notes 1 and 2) = ROL + ROQ – [Min. rate of consumption × Min. lead time]
= 300 units + 200 units – [10 units per day × 5 days]
= 450 units

(iii) Minimum level = ROL – Average rate of consumption × Average re-order-period
= 300 units – (15 units per day × 10 days) =150 units

(iv) Danger level = Average consumption × Lead time for emergency purchases
= 15 units per day × 4 days = 60 units

{4 M}

Working Notes:

1. Minimum rate of consumption per day

$$\text{Av. rate of consumption} = \frac{\text{Minimum rate of consumption} + \text{maximum rate of consumption}}{2}$$

$$15 \text{ units per day} = \frac{x \text{ units / day} + 20 \text{ units per day}}{2} \quad \text{or} \quad X = 10 \text{ units per day.}$$

{2 M}

2. Re-order Quantity (ROQ) = $\sqrt{\frac{2 \times 5{,}000 \text{ units} \times \text{Rs. } 20}{5}} = 200 \text{ units}$ **{2 M}**

Answer 2(b):

Calculation of total earnings:

= Time taken × Time rate + 50% (Time Allowed – Time Taken) × Time rate **{5 M}**

= 6 hrs. × Rs. 60 + 1/2 × (2 hrs. × Rs. 60) or Rs. 360 + Rs. 60 = Rs. 420

Of his total earnings, Rs. 360 is on account of the time worked and Rs. 60 is on account of his share of the premium bonus. **{5 M}**

Answer 3(a):

(a) Table of Primary Distribution of Overheads

Particulars	Basis of Apportionment	Total Amount	Production Department		Service Departments		
			Fabrication	Assembly	Stores	Maintenance	
Overheads Allocated	Allocation	27,28,000	15,52,000	7,44,000	2,36,000	1,96,000	**{1/2 M}**
Direct Costs	Actual	86,36,000	71,88,000	14,48,000	---	---	**{1/2 M}**
Other Overheads:							
Factory rent	Floor Area (48:20:5:7)	15,28,000	9,16,800	3,82,000	95,500	1,33,700	**{1/2 M}**
Factory building insurance	Floor Area (48:20:5:7)	1,72,000	1,03,200	43,000	10,750	15,050	**{1/2 M}**
Plant & Machinery insurance	Value of Plant & Machinery (66:30:3:7)	1,96,000	1,22,038	55,472	5,547	12,943	**{1/2 M}**
Plant & Machinery Depreciation	Value of Plant & Machinery (66:30:3:7)	2,65,000	1,65,000	75,000	7,500	17,500	**{1/2 M}**
Canteen Subsidy	No. of employees (60:40:19:6)	4,48,000	2,15,040	1,43,360	68,096	21,504	**{1/2 M}**
		1,39,73,000	1,02,62,078	28,90,832	4,23,393	3,96,697	

Re-distribution of Service Departments' Expenses:

Particulars	Basis of Apportionment	Production Department		Service Departments		
		Fabrication	Assembly	Stores	Maintenance	
Overheads as per Primary distribution	As per Primary distribution	1,02,62,078	28,90,832	4,23,393	3,96,697	
Maintenance Department Cost	Maintenance Hours (28:23:4:-)	2,01,955	1,65,891	28,851	(3,96,697)	**{1/2 M}**
		1,04,64,033	30,56,723	4,52,244	---	**{1/2 M}**
Stores Department	No. of Stores Requisition (18:7:-:-)	3,25,616	1,26,628	(4,52,244)		
		1,07,89,649	31,83,351	---	---	**{1/2 M}**

(b) Overhead Recovery Rate

Department	Apportioned Overhead (Rs.) (I)	Basis of Overhead Recovery Rate (II)	Overhead Recovery Rate (Rs.) [(I) ÷ (II)]	
Fabrication	1,07,89,649	30,00,000 Machine Hours	3.60 per Machine Hour	**{1 M}**
Assembly	31,83,351	26,00,000 Labour Hours	1.22 er Labour Hour	**{1 M}**

(c) Calculation of full production costs of Job no. IGI2014.

Particulars	Amount (Rs.)	
Direct Materials	1,15,200	**{3 M}**
Direct Labour:		
- Fabrication Deptt. (240 hours × Rs. 18)	4,320	
- Assembly Deptt. (180 hours × Rs. 18)	3,240	
Production Overheads:		
- Fabrication Deptt. (210 hours × Rs. 3.60)	756	
- Assembly Deptt. (180 hours × Rs. 1.22)	220	
Total Production Cost	1,23,736	

Answer 3(b):

(a) Cost Ledger Control A/c

		(Rs.)			(Rs.)	
To	Costing P&L A/c (sales)	3,00,000	By	Balance b/d	98,000	**{1 M}**
To	Stores Ledger Control A/c	3,000	By	Stores Ledger Control A/c	95,000	
				Wages Control A/c (Productive + Indirect wages)	65,000	
				Factory OH Control A/c	50,000	
				Selling & Admn. OH A/c	40,000	
To	Balance c/d	95,000		Costing P&L A/c (profit)	50,000	
		3,98,000			3,98,000	

(b) Stores Ledger Control A/c

		(Rs.)			(Rs.)	
To	Balance b/d	35,000	By	Cost Ledger Control A/c	3,000	**{1 M}**
To	Cost Ledger Control A/c	95,000	By	Work-in-process Control A/c	98,000	
To	Work-in-process	3,000	By	Balance c/d	32,000	
	Control A/c					
		1,33,000			1,33,000	

(c) Work-in-Process Control A/c

		(Rs.)			(Rs.)	
To	Balance b/d	38,000	By	Stores Ledger Control A/c	3,000	**{1 M}**
To	Store Ledger Control A/c	98,000	By	Finished Goods Control A/c	2,13,000	
To	Wages Control A/c	40,000	By	Balance c/d	20,000	
To	Factory OH Control A/c	60,000				
		2,36,000			2,36,000	

(d) Finished Goods Control A/c

		(Rs.)			(Rs.)	
To	Balance b/d	25,000	By	Cost of goods sold A/c	2,10,000	**{1 M}**
To	Work-in-process Control A/c	2,13,000	By	Balance c/d	28,000	
		2,38,000			2,38,000	

(e) Factory Overhead Control A/c

		(Rs.)			(Rs.)
To	Wages Control A/c (Indirect wages)	25,000	By	Work-in-process A/c (150% of Rs. 40,000)	60,000
To	Cost Ledger Control A/c	50,000	By	Balance c/d	15,000
		75,000			75,000

{1 M}

(f) Costing Profit and Loss A/c

		(Rs.)			(Rs.)
To	Cost of Goods Sold A/c	2,10,000	By	Cost Ledger	3,00,000
To	Selling and Admn. OH Control A/c	40,000		Control A/c (Sales)	
To	Cost Ledger Control A/c (Profit) (balancing figure)	50,000			
		3,00,000			3,00,000

{1 M}

(g) Trial Balance (as at 30th April, 20X8)

	Dr. (Rs.)	Cr. (Rs.)
Stores Ledger Control A/c	32,000	
Work-in-Process Control A/c	20,000	
Finished Goods Control A/c	28,000	
Factory Overhead Control A/c	15,000	
Cost Ledger Control A/c		95,000
	95,000	95,000

{1 M}

Working Notes:

(1) Wages Control A/c

		(Rs.)			(Rs.)
To	Cost Ledger Control A/c	65,000	By	Work-in-process Control A/c	40,000
			By	Factory OH Control A/c	25,000
		65,000			65,000

{1 M}

(2) Cost of Goods Sold A/c

		(Rs.)			(Rs.)
To	Finished Goods Control A/c	2,10,000	By	Costing P&L A/c	2,10,000
		2,10,000			2,10,000

{1 M}

(3) Selling & Administrative Expenses A/c

		(Rs.)			(Rs.)
To	Cost Ledger Control A/c	40,000	By	Costing P&L A/c	40,000
		40,000			40,000

{1 M}

Answer 4(a):

Process- I A/c

Particulars	Units	(Rs.)	Particulars	Units	(Rs.)
To Raw material used (Rs. 60 × 7,500 units)	7,500	4,50,000	By Normal loss (5% of 7,500 units) × Rs. 12.5	375	4,688
To Direct wages	--	1,35,750	By Process- II A/c (Rs. 96.7947 × 7,050 units)	7,050	6,82,403
To Direct expenses	--	81,450	By Abnormal loss (Rs. 96.7947 x 75 units)	75	7,259
To Manufacturing overhead		27,150			
	7,500	6,94,350		7,500	6,94,350

{3 M}

Cost per unit of completed units and abnormal loss:

$$\frac{\text{Total Cost} - \text{Realisable value from normal loss}}{\text{Inputs units} - \text{Normal loss units}}$$

$$= \frac{\text{Rs. } 6{,}94{,}350 - \text{Rs. } 4{,}688}{7{,}500 \text{ units} - 375 \text{ units}} = \frac{\text{Rs. } 6{,}89{,}662}{7{,}125 \text{ units}} = \text{Rs. } 96.7947 \quad \} \text{ {1 M}}$$

Process- II A/c

Particulars	Units	(Rs.)	Particulars	Units	(Rs.)
To Process- I A/c	7,050	6,82,403	By Normal loss (10% of 7,050 units)× Rs. 37.5	705	26,438
To Direct wages	--	1,29,250	By Finished Stock A/c (Rs.140.0496 × 6,525 units)	6,525	9,13,824
To Direct expenses	--	84,013			
To Manufacturing overhead	--	19,387			
To Abnormal gain (Rs. 140.0496 × 180 units)	180	25,209			
	7,230	9,40,262		7,230	9,40,262

{3 M}

Cost per unit of completed units and abnormal loss:

$$\frac{\text{Total Cost} - \text{Realisable value from normal loss}}{\text{Inputs units} - \text{Normal loss units}}$$

$$= \frac{\text{Rs. } 9{,}15{,}053 - \text{Rs. } 26{,}438}{7{,}050 \text{ units} - 705 \text{ units}} \qquad = \frac{\text{Rs. } 8{,}88{,}615}{6{,}345 \text{ units}} = \text{Rs. } 140.0496 \quad \} \text{ {1 M}}$$

Finished Goods Stock A/c

Particulars	Units	(Rs.)	Particulars	Units	(Rs.)
To Process II A/c	6,525	9,13,824	By Cost of Sales	6,000	8,40,298
			(Rs.140.0496 ×6,000 units)		
			By Balance c/d	525	73,526
	6,525	9,13,824		6,525	9,13,824

{1 M}

Income Statement

Particulars	(Rs.)	Particulars	(Rs.)
To Cost of sales (Rs. 140.0496 × 6,000 units)	8,40,298	By Abnormal gain {180 units × (Rs.140.0496 – Rs.37.50)}	18,459
To Abnormal loss {75 units × (Rs.96.7947 – Rs.12.50)}	6,322	By Sales (Rs.8,40,298 × 115%)	9,66,343
To Net Profit	1,38,182		
	9,84,802		9,84,802

{1 M}

Answer 4(b):

(i) Material Cost Variance = Standard Cost – Actual Cost

Or = SP × SQ – AP × AQ

A = (Rs. 12,000 × 18 tonne × 0.74) – Rs. 1,62,000 = Rs. 2,160 (A)

B = (Rs. 23,500 × 18 tonne × 0.40) – Rs. 1,65,200 = Rs. 4,000 (F)

C = (Rs. 18,000 × 18 tonne × 0.64) – Rs. 2,07,000 = Rs. 360 (F)
= Rs. 2,200 (F) **{2 M}**

(ii) Material Price Variance = Actual Quantity (Std. Price – Actual Price)

Or	= AQ × SP – AQ × AP	
A	= (13.12 tonne × Rs. 12,000) – Rs. 1,62,000	
	= Rs. 1,57,440 - Rs. 1,62,000	= Rs. 4,560 (A)
B	= (7.1 tonne × Rs. 23,500) – Rs. 1,65,200	
	= Rs. 1,66,850 - Rs. 1,65,200	= Rs. 1,650 (F)
C	= (11.5 tonne × Rs. 18,000) – Rs. 2,07,000	
	= Rs. 2,07,000 - Rs. 2,07,000	= Nil
		= Rs. 2,910 (A) **{2 M}**

(iii) Material Usage Variance = Std. Price (Std. Quantity – Actual Quantity)
Or = SP × SQ – SP × AQ
A = (Rs.12,000 × 18 tonne × 0.74) – (Rs. 12,000 × 13.12 tonne)
= Rs. 1,59,840 – Rs. 1,57,440 = Rs. 2,400 (F)
B = (Rs.23,500 × 18 tonne × 0.40) – (Rs. 23,500 × 7.10 tonne)
= Rs. 1,69,200 – Rs. 1,66,850 = Rs. 2,350 (F)
C = (Rs.18,000 × 18 tonne × 0.64) – (Rs. 18,000 × 11.5 tonne)
= Rs. 2,07,360 – Rs. 2,07,000 = Rs. 360 (F)
= Rs. 5,110 (F) **{2 M}**

(iv) Material Mix Variance = Std. Price (Revised Std. Quantity – Actual Quantity)
Or = SP × RSQ – SP × AQ
A = $\left(Rs.12{,}000\times 31.72 tonne\times\frac{0.74}{1.78}\right)-(Rs.12{,}000\times 13.12 tonne)$
= Rs. 1,58,243.6 – Rs. 1,57,440 = Rs. 803.60 (F)
B = $\left(Rs.23{,}500\times 31.72 tonne\times\frac{0.40}{1.78}\right)-(Rs.23{,}500\times 7.10 tonne)$
= Rs. 1,67,510.11 – Rs. 1,66,850 = Rs. 660.11 (F)
C = $\left(Rs.18{,}000\times 31.72 tonne\times\frac{0.64}{1.78}\right)-(Rs.18{,}000\times 11.5 tonne)$
= Rs. 2,05,288.99 – Rs. 2,07,000 = Rs. 1,711.01 (A)
= Rs. 2,47.30 (A) **{2 M}**

(v) Material Yield Variance = Std. Price (Std. Quantity – Revised Std. Quantity)
Or = SP × SQ – SP × RSQ
A = $(Rs.12{,}000\times 18 tonne\times 0.74)-\left(Rs.12{,}000\times 31.72 tonne\times\frac{0.74}{1.78}\right)$
= Rs. 1,59,840 – Rs. 1,58,243.6 = Rs. 1,596.40 (F)
B = $(Rs.23{,}500\times 18 tonne\times 0.40)-\left(Rs.23{,}500\times 31.72 tonne\times\frac{0.40}{1.78}\right)$
= Rs. 1,69,200 – Rs. 1,67,510.11 = Rs. 1,689.89 (F)
C = $(Rs.18{,}000\times 18 tonne\times 0.64)-\left(Rs.18{,}000\times 31.72 tonne\times\frac{0.64}{1.78}\right)$
= Rs. 2,07,360 – Rs. 2,05,288.99 = Rs. 2,071.01 (F)
= Rs. 5,357.30 (F) **{2 M}**

Answer 5(a):
Calculation of Profit made in the month of August 2014 by selling 14,000 units.

	Amount per unit (Rs.)	Amount (Rs.)

Sales Revenue	18.00	2,52,000
Less: Variable Costs:		
- Direct Material	8.00	1,12,000
- Direct Labour	3.50	49,000
- Variable Overhead	2.50	35,000
Contribution	4.00	56,000
Less: Fixed Overhead	2.00	28,000
Profit	2.00	28,000
	{1 M}	**{1 M}**

(i) To maintain the same amount of profit i.e. Rs. 28,000 in September 2014 also, the company needs to maintain a contribution of Rs. 56,000.

Let, number of units to be sold in September 2014 is 'x', then the contribution will be

Rs. 18 x – [(Rs.8 × 1.10) + Rs. 3.5 + (Rs. 2.5 × 1.05)] x = Rs. 56,000

Rs. 18 x – (Rs. 8.8 + Rs. 3.5 + Rs. 2.625) x = Rs. 56,000

Or, x $= \frac{Rs.56{,}000}{Rs.3.075}$

= 18,211.38 units or 18,212 units. **{2 M}**

(ii) Margin of Safety

	August 2014	September 2014
Profit	Rs. 28,000	Rs. 28,000
P/V Ratio	$\frac{Rs.4}{Rs.18}\times 100$	$\frac{Rs.3.075}{Rs.18}\times 100$
Margin of Safety $\left(\frac{Profit}{P/V Ratio}\times 100\right)$	**{3 M}** Rs. 1,26,000 $\left(\frac{28{,}000}{400}\times 18\times 100\right)$	Rs. 1,63,902.44 **{3 M}** $\left(\frac{28{,}000}{307.5}\times 18\times 100\right)$

Answer 5(b):

(a) Preparation of Production Budget (in units)

	October	November	December	January
Demand for the month (Nos.)	4,000	3,500	4,500	6,000
Add: 20% of next month's demand	700	900	1,200	1,300
Less: Opening Stock	(950)	(700)	(900)	(1,200)
Vehicles to be produced	3,750	3,700	4,800	6,100
	{1 M}	**{1 M}**	**{1 M}**	**{1 M}**

(b) Preparation of Purchase budget for Part-X

	October	November	December
Production for the month (Nos.)	3,750	3,700	4,800
Add: 40% of next month's production	1,480 (40% of 3,700)	1,920 (40% of 4,800)	2,440 (40% of 6,100)
	5,230	5,620	7,240
No. of units required for production	20,920 (5,230 × 4 units)	22,480 (5,620 × 4 units)	28,960 (7,240 × 4 units)
Less: Opening Stock	(4,800)	(5,920) (1,480 × 4 units)	(7,680) (1,920 × 4 units)
No. of units to be purchased	16,120	16,560	21,280
	{1 M}	**{1 M}**	**{1 M}**

(c) Budgeted Gross Profit for the Quarter October to December

	October	November	December	Total
Sales in nos.	4,000	3,500	4,500	12,000
Net Selling Price per unit*	Rs. 3,46,150	Rs. 3,46,150	Rs. 3,46,150	
Sales Revenue (Rs. in lakh)	13,846	12,115.25	15,576.75	41,538
Less: Cost of Sales (Rs. in lakh) (Sales unit × Cost per unit)	11,428	9,999.50	12,856.50	34,284
Gross Profit (Rs. in lakh)	2,418 **{1 M}**	2,115.75 **{1 M}**	2,720.25 **{1 M}**	7,254

* Net Selling price unit = Rs. 3,95,600 – 12.5% commission on Rs. 3,95,600 = Rs. 3,46,150

Answer 6:

(a) Cost Accounting is defined as "the process of accounting for cost which begins with the recording of income and expenditure or the bases on which they are calculated and ends with the preparation of periodical statements and reports for ascertaining and controlling costs."

The main objectives of the cost accounting are as follows:

(a) Ascertainment of cost: There are two methods of ascertaining costs, viz., Post Costing and Continuous Costing. Post Costing means, analysis of actual information as recorded in financial books. Continuous Costing, aims at collecting information about cost as and when the activity takes place so that as soon as a job is completed the cost of completion would be known. **{1 M}**

(b) Determination of selling price: Business enterprises run on a profit making basis. It is thus necessary that the revenue should be greater than the costs incurred. Cost accounting provides the information regarding the cost to make and sell the product or services produced. **{1 M}**

(c) Cost control and cost reduction: To exercise cost control, the following steps should be observed: **{1 M}**
   (i) Determine clearly the objective.
   (ii) Measure the actual performance.
   (iii) Investigate into the causes of failure to perform according to plan;
   (iv) Institute corrective action.

(d) Cost Reduction may be defined "as the achievement of real and permanent reduction in the unit cost of goods manufactured or services rendered without impairing their suitability for the use intended or diminution in the quality of the product." **{1 M}**

(e) Ascertaining the profit of each activity: The profit of any activity can be ascertained by matching cost with the revenue of that activity. The purpose under this step is to determine costing profit or loss of any activity on an objective basis. **{1 M}**

(f) Assisting management in decision making: Decision making is defined as a process of selecting a course of action out of two or more alternative courses. For making a choice between different courses of action, it is necessary to make a comparison of the outcomes, which may be arrived under different alternatives.

Answer 6:

(b)

	Cost Control		**Cost Reduction**
1.	Cost control aims at maintaining the costs in accordance with the established standards.	1.	Cost reduction is concerned with reducing costs. It challenges all standards and endeavours to better them continuously

1 M

2.	Cost control seeks to attain lowest possible cost under existing conditions.	2.	Cost reduction recognises no condition as permanent, since a change will result in lower cost.	**1 M**
3.	In case of cost control, emphasis is on past and present	3.	In case of cost reduction, it is on present and future.	**1 M**
4.	Cost control is a preventive function	4.	Cost reduction is a corrective function. It operates even when an efficient cost control system exists.	**1 M**
5.	Cost control ends when targets are achieved.	5.	Cost reduction has no visible end.	**1 M**

Answer 6:

(c) **(i)** **Controllable Costs**: - Cost that can be controlled, typically by a cost, profit or investment centre manager is called controllable cost. Controllable costs incurred in a particular responsibility centre can be influenced by the action of the executive heading that responsibility centre. For example, direct costs comprising direct labour, direct material, direct expenses and some of the overheads are generally controllable by the shop level management.

(ii) **Uncontrollable Costs** - Costs which cannot be influenced by the action of a specified member of an undertaking are known as uncontrollable costs. For example, expenditure incurred by, say, the tool room is controllable by the foreman in-charge of that section but the share of the tool-room expenditure which is apportioned to a machine shop is not to be controlled by the machine shop foreman.

5 M

Answer 6:

(d) In some process industries the output of one process is transferred to the next process not at cost but at market value or cost plus a percentage of profit. The difference between cost and the transfer price is known as inter-process profits. **{1 M}**

The advantages and disadvantages of using inter-process profit, in the case of process type industries are as follows:

Advantages:

1. Comparison between the cost of output and its market price at the stage of completion is facilitated.
2. Each process is made to stand by itself as to the profitability. **{2 M}**

Disadvantages:

1. The use of inter-process profits involves complication.
2. The system shows profits which are not realised because of stock not sold out. **{2 M}**

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