

MOCK TEST PAPER – 1
INTERMEDIATE (IPC): GROUP – I
PAPER – 3: COST MANAGEMENT ACCOUNTING

Suggested Answers/ Hints

1. (a) (i) Break-even sales = $\frac{\text{Fixed Cost}}{\text{P/V Ratio}}$

$$\text{P/V Ratio} = \frac{\text{Change in Profit}}{\text{Change in Sales}} \times 100 \text{ or, } \frac{\text{₹ } 37,50,000}{\text{₹ } 7,80,60,000 - \text{₹ } 5,93,10,000} \times 100$$

$$\text{Or, } \frac{\text{₹ } 37,50,000}{\text{₹ } 1,87,50,000} \times 100 \text{ or, } 20\%$$

$$\text{Break-even sales} = \frac{\text{₹ } 98,50,000}{20\%} = \text{₹ } 4,92,50,000$$

(ii) Profit/ loss = Contribution – Fixed Cost
 = ₹ 8,20,00,000 × 20% - ₹ 98,50,000
 = ₹ 1,64,00,000 – ₹ 98,50,000 = ₹ 65,50,000

(iii) To earn same amount of profit in 2022-23 as was in 2021-22, it has to earn the same amount of contribution as in 2021-22.

Sales – Variable cost = Contribution equal to 2021-22 contribution

$$\begin{aligned} \text{Contribution in 2021-22} &= \text{Sales in 2021-22} \times \text{P/V Ratio in 2021-22} \\ &= \text{₹ } 5,93,10,000 \times 20\% = \text{₹ } 1,18,62,000 \end{aligned}$$

Let the number of units to be sold in 2022-23 = X

Sales in 2022-23 – Variable cost in 2022-23 = Desired Contribution

$$90 X - 80 X = \text{₹ } 1,18,62,000$$

$$\text{Or, } 10 X = 1,18,62,000$$

$$\text{Or, } X = 11,86,200 \text{ units}$$

Therefore, Sales amount required to earn a profit equal to 2021-22 profit

$$= \text{₹ } 90 \times 11,86,200 \text{ units} = \text{₹ } 10,67,58,000$$

(b) (i) Optimum run size or Economic Batch Quantity (EBQ) = $\sqrt{\frac{2 \times D \times S}{C}}$

Where, D = Annual demand = 9,20,000 units

S = Set-up cost per run = ₹ 3,500

C = Inventory holding cost per unit per annum

$$= \text{₹ } 1.5 \times 12 \text{ months} = \text{₹ } 18$$

$$\text{EBQ} = \sqrt{\frac{2 \times 9,20,000 \text{ units} \times \text{₹ } 3,500}{\text{₹ } 18}} = 18,915 \text{ units}$$

(ii) Calculation of Total Cost of set-up and inventory holding

	Batch size	No. of set-ups	Set-up Cost (₹)	Inventory holding cost (₹)	Total Cost (₹)
A	40,000 units	23 $\left(\frac{9,20,000}{40,000}\right)$	80,500 (23 × ₹ 3,500)	3,60,000 $\left(\frac{40,000 \times ₹ 18}{2}\right)$	4,40,500
B	18,915 units	49 $\left(\frac{9,20,000}{18,915}\right)$	1,71,500 (49 × ₹ 3,500)	1,70,235 $\left(\frac{18,915 \times ₹ 18}{2}\right)$	3,41,735
	Extra Cost (A – B)				98,765

(c) Calculation of cost per unit:

Particulars	Units	(₹)
Listed Price of Materials	5,000	2,50,000
Less: Trade discount @ 10% on invoice price		(25,000)
		2,25,000
Add: CGST @ 6% of ₹ 2,25,000		13,500
Add: SGST @ 6% of ₹ 2,25,000		13,500
		2,52,000
Add: Toll Tax		5,000
Freight and Insurance		17,000
Commission and Brokerage Paid		10,000
Add: Cost of returnable containers:		
Amount deposited ₹ 30,000		
Less: Amount refunded ₹ 20,000		10,000
		2,94,000
Add: Other Expenses @ 2% of Total Cost $\left(\frac{₹ 2,94,000}{98} \times 2\right)$		6,000
Total cost of material		3,00,000
Less: Shortage material due to normal reasons @ 20%	1,000	-
Total cost of material of good units	4,000	3,00,000
Cost per unit (₹ 3,00,000/4,000 units)		75

Note:

1. GST is payable on net price i.e., listed price less discount.
2. Cash discount is treated as interest and finance charges; hence it is ignored.
3. Demurrage is penalty imposed by the transporter for delay in uploading or off-loading of materials. It is an abnormal cost and not included.
4. Shortage due to normal reasons should not be deducted from cost to ascertain total cost of good units

(d) Output by experienced workers in 50,000 hours = $\frac{50,000}{10} = 5,000$ units

∴ Output by new recruits = 60% of 5,000 = 3,000 units

Loss of output = 5,000 – 3,000 = 2,000 units

Total loss of output = Due to delay recruitment + Due to inexperience

= 10,000 + 2,000 = 12,000 units

Contribution per unit = 20% of ₹180 = ₹ 36

Total contribution lost = ₹36 × 12,000 units = ₹ 4,32,000

Cost of repairing defective units = 3,000 units × 0.2 × ₹ 25 = ₹ 15,000

Profit forgone due to labour turnover

	(₹)
Loss of Contribution	4,32,000
Cost of repairing defective units	15,000
Recruitment cost	1,56,340
Training cost	1,13,180
Settlement cost of workers leaving	1,83,480
Profit forgone in 2022-23	9,00,000

2. (a) **Process-I A/c**

Particulars	Qty. (kgs)	Amount)	Particulars	Qty. (kgs)	Amount (₹)
To Material A	6,000	3,00,000	By Normal loss	500	8,000
To Material B	4,000	4,00,000	By Process-II A/c	9,200	7,38,857
To Labour	--	21,500	By Abnormal loss A/c	300	24,093
To Overhead ($\frac{₹ 92,000 \times 430 \text{ hrs}}{800 \text{ hrs}}$)	--	49,450			
	10,000	7,70,950		10,000	7,70,950

* $\frac{\{₹(3,00,000 + ₹4,00,000 + ₹21,500 + ₹49,450) - ₹8,000\}}{(10,000 - 500) \text{ units}} = \frac{₹7,70,950 - ₹8,000}{9,500 \text{ units}} = ₹80.3105$

Process-II A/c

Particulars	Qty. (kgs)	Amount (₹)	Particulars	Qty. (kgs)	Amount (₹)
To Process-I A/c	9,200	7,38,857	By Normal loss	1,000	--
To Material C	6,600	8,25,000	By Packing Dept. A/c (See the working notes)	18,000	18,42,496
To Material D	4,200	3,15,000	By WIP A/c (See the working notes)	1,000	1,00,711

To Flavouring essence	--	3,300			
To Labour	--	18,500			
To Overheads ($\frac{₹ 92,000 \times 370 \text{ hrs}}{800 \text{ hrs}}$)	--	42,550			
	20,000	19,43,207		20,000	19,43,207

Abnormal loss A/c

Particulars	Qty. (kgs)	Amount (₹)	Particulars	Qty. (kgs)	Amount (₹)
To Process-I A/c	300	24,093	By Bank	300	4,800
			By Costing Profit & Loss A/c	--	19,293
	300	24,093		300	24,093

Working Notes:

Calculation of Equivalent Production units

Input	Units	Output	Units	Process-I		Mat-C & D		Labour & OH	
				(%)	Units	(%)	Units	(%)	Units
	9,200	Transferred to Packing.	18,000	100	18,000	100	18,000	100	18,000
Mat-C	6,600	Closing WIP	1,000	100	1,000	100	1,000	50	500
Mat-D	4,200	Normal loss	1,000	--	--	--	--	--	--
	20,000		20,000		19,000		19,000		18,500

Calculation of Unit cost

Cost component	Amount (₹)	Equivalent units	Cost per unit (₹)
Transferred-in	7,38,857	19,000	38.8872
Material-C	8,25,000	19,000	43.4211
Material-D	3,15,000	19,000	16.5789
Flavouring essence	3,300	19,000	0.1737
Total Material Cost	18,82,157	19,000	99.0609
Labour	18,500	18,500	1.0000
Overheads	42,550	18,500	2.3000
Total Cost	19,43,207		102.3609

Value of Materials transferred to Packing Department

$$= 18,000 \text{ unit} \times ₹102.3609 = 18,42,496$$

$$\text{Value of WIP: For Materials- } 1,000 \text{ units} \times ₹99.0609 = ₹99,061$$

$$\text{For Labour \& Overheads } 500 \text{ units} \times ₹3.30 = ₹1,650$$

$$\underline{₹1,00,711}$$

(b) (i)

PCP Limited's

Statement of operating income and gross margin percentage
for each of its supermarket segments

Particulars	Supermarket A	Supermarket B	Total
Revenues: (₹)	11,21,67,000 (660 × ₹ 1,69,950)	9,52,87,500 (1,650 × ₹ 57,750)	20,74,54,500
Less: Cost of goods sold: (₹)	10,89,00,000 (660 × ₹ 1,65,000)	9,07,50,000 (1650 × ₹ 55,000)	19,96,50,000
Gross Margin: (₹)	32,67,000	45,37,500	78,04,500
Less: Other operating costs: (₹)			16,55,995
Operating income: (₹)			61,48,505
Gross Margin	2.91%	4.76 %	3.76%
Operating income %			2.96%

(ii)

Operating Income Statement of each distribution channel
in April (Using the Activity based Costing information)

	Supermarket A	Supermarket B
Gross margin (₹) : (A) (Refer to (i) part of the answer)	32,67,000	45,37,500
Operating cost (₹): (B) (Refer to working note)	6,55,600	10,00,395
Operating income (₹): (A-B)	26,11,400	35,37,105
Operating income (in %) (Operating income/Revenue) ×100	2.33	3.71

Working note:

Computation of rate per unit of the cost allocation base for each of the five activity areas for the month of April

	(₹)
Store delivery [₹ 3,90,500/ (1,100 + 2,805 store deliveries)]	100 per delivery
Cartons dispatched [₹ 4,15,250/ {(250×1,100) + (50×2,805)} carton dispatches]	1 per carton dispatch
Shelf-stocking at customer store (₹) [₹ 64,845/ {(6×1,100) + (1.5×2,805)} hours]	6 per hour
Line item ordering [₹ 3,45,400/ {(14×770) + (12×1,980)} line items]	10 per line item order
Customer purchase order processing [₹ 4,40,000/ (770 + 1,980 orders)]	160 per order

Computation of operating cost of each distribution channel:

	Supermarket A (₹)	Supermarket B (₹)
Store delivery	1,10,000 (₹ 100 × 1,100 deliveries)	2,80,500 (₹ 100 × 2,805 deliveries)
Cartons dispatched	2,75,000 (₹ 1 × 250 cartons × 1,100 deliveries)	1,40,250 (₹ 1 × 50 cartons × 2,805 deliveries)
Shelf stocking	39,600 (₹ 6 × 1,100 deliveries × 6 Av. hrs.)	25,245 (₹ 6 × 2,805 deliveries × 1.5 Av. hrs.)
Line item ordering	1,07,800 (₹ 10 × 14 line item × 770 orders)	2,37,600 (₹ 10 × 12 line item × 1,980 orders)
Customer purchase order processing	1,23,200 (₹ 160 × 770 orders)	3,16,800 (₹ 160 × 1,980 orders)
Operating cost	6,55,600	10,00,395

3. (a) (i) Statement showing the apportionment of joint costs to A, B and X

Products	A	B	X	Total
Output (kg)	18,000	10,000	54,000	
Sales value at the point of split off (₹)	9,00,000 (₹ 50 × 18,000)	4,00,000 (₹ 40 × 10,000)	5,40,000 (₹ 10 × 54,000)	18,40,000
Joint cost apportionment on the basis of sales value at the point of split off (₹)	6,30,000 $\left(\frac{₹ 12,88,000}{₹ 18,40,000} \times ₹ 9,00,000 \right)$	2,80,000 $\left(\frac{₹ 12,88,000}{₹ 18,40,000} \times ₹ 4,00,000 \right)$	3,78,000 $\left(\frac{₹ 12,88,000}{₹ 18,40,000} \times ₹ 5,40,000 \right)$	12,88,000

(ii) Statement showing the cost per kg. of each product

(indicating joint cost; further processing cost and total cost separately)

Products	A	B	X
Joint costs apportioned (₹) : (I)	6,30,000	2,80,000	3,78,000
Production (kg) : (II)	18,000	10,000	54,000
Joint cost per kg (₹): (I ÷ II)	35	28	7
Further processing Cost per kg. (₹)	10 $\left(\frac{₹ 1,80,000}{18,000 \text{ kg}} \right)$	15 $\left(\frac{₹ 1,50,000}{10,000 \text{ kg}} \right)$	2 $\left(\frac{₹ 1,08,000}{54,000 \text{ kg}} \right)$
Total cost per kg (₹)	45	43	9

(iii) Statement showing the product wise and total profit for the period

Products	A	B	X	Total
Sales value (₹)	12,24,000	2,50,000	7,92,000	

Add: Closing stock value (₹) (Refer to Working note 2)	45,000	2,15,000	90,000	
Value of production (₹)	12,69,000	4,65,000	8,82,000	26,16,000
Apportionment of joint cost (₹)	6,30,000	2,80,000	3,78,000	
Add: Further processing cost (₹)	1,80,000	1,50,000	1,08,000	
Total cost (₹)	8,10,000	4,30,000	4,86,000	17,26,000
Profit (₹)	4,59,000	35,000	3,96,000	8,90,000

Working Notes

1.

Products	A	B	X
Sales value (₹)	12,24,000	2,50,000	7,92,000
Quantity sold (Kgs.)	17,000	5,000	44,000
Selling price ₹/kg	72	50	18
	$\left(\frac{₹ 12,24,000}{17,000 \text{ kg}} \right)$	$\left(\frac{₹ 2,50,000}{5,000 \text{ kg}} \right)$	$\left(\frac{₹ 7,92,000}{44,000 \text{ kg}} \right)$

2. Valuation of closing stock:

Since the selling price per kg of products A, B and X is more than their total costs, therefore closing stock will be valued at cost.

Products	A	B	X	Total
Closing stock (kgs.)	1,000	5,000	10,000	
Cost per kg (₹)	45	43	9	
Closing stock value (₹)	45,000 (₹ 45 x 1,000 kg)	2,15,000 (₹ 43 x 5,000 kg)	90,000 (₹ 9 x 10,000 kg)	3,50,000

(iv) Calculations for processing decision

Products	A	B	X
Selling price per kg at the point of split off (₹)	50	40	10
Selling price per kg after further processing (₹) (Refer to working Note 1)	72	50	18
Incremental selling price per kg (₹)	22	10	8
Less: Further processing cost per kg (₹)	(10)	(15)	(2)
Incremental profit (loss) per kg (₹)	12	(5)	6

Product A and X has an incremental profit per unit after further processing, hence, these two products may be further processed. However, further processing of product B is not profitable hence, product B shall be sold at split off point.

(b) (a) (i) Production Budget (in units) for the year ended 31st March 2023

	Product M	Product N
Budgeted sales (units)	28,000	13,000
Add: Increase in closing stock	320	160

No. good units to be produced	28,320	13,160
Post production rejection rate	4%	6%
No. of units to be produced	29,500	14,000
	$\left(\frac{28,320}{0.96}\right)$	$\left(\frac{13,160}{0.94}\right)$

(ii) Purchase budget (in kgs and value) for Material Z

	Product M	Product N
No. of units to be produced	29,500	14,000
Usage of Material Z per unit of production	5 kg.	6 kg.
Material needed for production	1,47,500 kg.	84,000 kg.
Materials to be purchased	1,63,889 kg.	88,421 kg.
	$\left(\frac{1,47,500}{0.90}\right)$	$\left(\frac{84,000}{0.95}\right)$
Total quantity to be purchased	2,52,310 kg.	
Rate per kg. of Material Z	₹36	
Total purchase price	₹90,83,160	

(b) Calculation of Economic Order Quantity for Material Z

$$EOQ = \sqrt{\frac{2 \times 2,52,310 \text{ kg.} \times ₹320}{₹36 \times 11\%}} = \sqrt{\frac{16,14,78,400}{₹3.96}} = 6,385.72 \text{ kg.}$$

4. (a) Effective machine hours = 200 hours × 75% = 150 hours

Computation of Comprehensive Machine Hour Rate

	Per month (₹)	Per hour (₹)
Fixed cost		
Supervision charges	18,000.00	
Electricity and lighting	9,500.00	
Insurance of Plant and building (₹18,250 ÷ 12)	1,520.83	
Other General Expenses (₹17,500 ÷ 12)	1,458.33	
Depreciation (₹64,800 ÷ 12)	5,400.00	
	35,879.16	239.19
Direct Cost		
Repairs and maintenance	17,500.00	116.67
Power	65,000.00	433.33
Wages of machine man		139.27
Wages of Helper		109.41
Machine Hour rate (Comprehensive)		1,037.87

Wages per machine hour

	Machine man	Helper
Wages for 200 hours		
Machine-man (₹400 × 25)	₹10,000.00	---
Helper (₹275 × 25)	---	₹6,875.00
Dearness Allowance (DA)	₹4,575.00	₹4,575.00
	₹14,575.00	₹11,450.00
Production bonus (1/3 of Basic and DA)	4,858.33	3,816.67
Leave wages (10% of Basic and DA)	1,457.50	1,145.00
	20,890.83	16,411.67
Effective wage rate per machine hour	₹139.27	₹109.41

(b) Statement of Cost of G Ltd. for the year ended 31st March, 2023:

Sl. No.	Particulars	Amount (₹)	Amount (₹)
(i)	Material Consumed:		
	- Raw materials purchased	20,00,00,000	
	- Freight inward	22,41,200	
	Add: Opening stock of raw materials	36,00,000	
	Less: Closing stock of raw materials	(19,20,000)	20,39,21,200
(ii)	Direct employee (labour) cost:		
	- Wages paid to factory workers		58,40,000
(iii)	Direct expenses:		
	- Royalty paid for production	3,45,200	
	- Amount paid for power & fuel	9,24,000	
	- Job charges paid to job workers	16,24,000	28,93,200
	Prime Cost		21,26,54,400
(iv)	Works/ Factory overheads:		
	- Stores and spares consumed	2,24,000	
	- Repairs & Maintenance paid for plant & machinery	96,000	
	- Insurance premium paid for plant & machinery	62,400	
	- Insurance premium paid for factory building	36,200	
	- Expenses paid for pollution control and engineering & maintenance	53,200	4,71,800
	Gross factory cost		21,31,26,200
	Add: Opening value of W-I-P		18,40,000
	Less: Closing value of W-I-P		(17,40,000)
	Factory Cost		21,32,26,200

(v)	Quality control cost: - Expenses paid for quality control check activities		39,200
(vi)	Research & development cost paid improvement in production process		36,400
(vii)	Less: Realisable value on sale of scrap and waste		(1,72,000)
(viii)	Add: Primary packing cost		1,92,000
	Cost of Production		21,33,21,800
	Add: Opening stock of finished goods		22,00,000
	Less: Closing stock of finished goods		(36,40,000)
	Cost of Goods Sold		21,18,81,800
(ix)	Administrative overheads: - Depreciation on office building - Salary paid to General Manager	1,12,000 25,12,000	26,24,000
(x)	Selling overheads: - Repairs & Maintenance paid for sales office building - Salary paid to Manager- Sales & Marketing - Performance bonus paid to sales staffs	36,000 20,24,000 3,60,000	24,20,000
(xi)	Distribution overheads: - Packing cost paid for re-distribution of finished goods		2,24,000
	Cost of Sales		21,71,49,800

5. (a) (i) **Annual Cost Statement of three vehicles**

	(₹)
Diesel $\{(1,34,784 \text{ km.} \div 4 \text{ km}) \times ₹ 65\}$ (Refer to Working Note 1)	21,90,240
Oil & sundries $\{(1,34,784 \text{ km.} \div 100 \text{ km.}) \times ₹ 250\}$	3,36,960
Maintenance $\{(1,34,784 \text{ km.} \times ₹ 0.25) + ₹ 6,000\}$ (Refer to Working Note 2)	39,696
Drivers' salary $\{₹24,000 \times 12 \text{ months}\} \times 3 \text{ trucks}$	8,64,000
Licence and taxes $(₹ 25,000 \times 3 \text{ trucks})$	75,000
Insurance	45,000
Depreciation $\{₹ 29,00,000 \div 10 \text{ years}\} \times 3 \text{ trucks}$	8,70,000
General overhead	1,15,600
Total annual cost	45,36,496

(ii) **Cost per km. run**

$$\text{Cost per kilometer run} = \frac{\text{Total annual cost of vehicles}}{\text{Total kilometre travelled annually}} \quad (\text{Refer to Working Note 1})$$

$$= \frac{\text{₹ } 45,36,496}{1,34,784 \text{ Kms}} = \text{₹ } 33.66$$

(iii) **Freight rate per tonne km (to yield a profit of 10% on freight)**

$$\text{Cost per tonne km.} = \frac{\text{Total annual cost of three vehicles}}{\text{Total effective tonnes kms. per annum}} \quad (\text{Refer to Working Note 1})$$

$$= \frac{\text{₹ } 45,36,496}{6,06,528 \text{ kms}} = \text{₹ } 7.48$$

$$\text{Freight rate per tonne km.} \left(\frac{\text{₹ } 7.48}{0.9} \right) \times 1 = \text{₹ } 8.31$$

Working Notes:

1. **Total kilometer travelled and Commercial tonnes kilometer (load carried) by three trucks in one year**

Truck	One way distance in kms	No. of trips	Total distance covered in km per day (with load)	Total distance covered in km per day (up & down)	Load carried per trip / day in tonnes	Total effective tonnes km
	a	b	c = a × b	d = c × 2	e	f = 27/3 × c
1	16	4	64	128	6	576
2	40	2	80	160	9	720
3	30	3	90	180	12	810
Total			234	468	27	2,106

Total kilometre travelled by three trucks in one year

$$(468 \text{ km.} \times 24 \text{ days} \times 12 \text{ months}) = 1,34,784$$

Total effective tonnes kilometre of load carried by three trucks during one year

$$(2,106 \text{ tonnes km.} \times 24 \text{ days} \times 12 \text{ months}) = 6,06,528 \text{ tonne-km}$$

2. Fixed and variable component of maintenance cost:

$$\begin{aligned} \text{Variable maintenance cost per km.} &= \frac{\text{Difference in maintenance cost}}{\text{Difference in distance travelled}} \\ &= \frac{\text{₹ } 46,050 - \text{₹ } 45,175}{1,60,200 \text{ kms} - 1,56,700 \text{ kms}} = \text{₹ } 0.25 \end{aligned}$$

Fixed maintenance cost = Total maintenance cost – Variable maintenance cost

$$= \text{₹ } 46,050 - 1,60,200 \text{ kms} \times \text{₹ } 0.25 = \text{₹ } 6,000$$

(b) **Workings:**

1. **Calculation of Standard Qty. of Explosives and Detonators for actual output:**

	Particulars	Iron ore	Overburden (OB)	Total
SME:				
A	Actual Output	20,000 tonne	58,000 M ³	
B	Standard Qty per unit	2.4 kg./tonne	1.9 kg./M ³	
C	Standard Qty. for actual production [A×B]	48,000 kg.	1,10,200 kg.	1,58,200 kg.

Detonators:			
D	Standard Qty per unit	2 pcs/ tonne	2 pcs/ M ³
E	Standard Qty. for actual production [A×D]	40,000 pcs.	1,16,000 pcs
			1,56,000 pcs

2. **Calculation of Actual Price per unit of materials:**

Material	Quantity [A]	Amount (₹) [B]	Rate (₹) [C = B÷A]
SME	1,67,200 kg.	63,53,600	38.00
Detonators	1,18,400 pcs	24,27,200	20.50

(i) **Computation of material price variance:**

Material Price Variance	= Actual Qty. × (Std. Price - Actual Price)
SME	= 1,67,200 kg. × (₹ 40 – ₹ 38) = ₹ 3,34,400 (F)
Detonators	= 1,18,400 pcs × (₹ 20 – ₹ 20.5) = ₹ 59,200 (A)
Total	= ₹ 2,75,200 (F)

(ii) **Computation of material quantity variance:**

Material Qty. Variance	= Std. Price × (Std. Qty for actual output - Actual Qty.)
SME	= ₹ 40 × (1,58,200 kg. - 1,67,200 kg.) = ₹ 3,60,000 (A)
Detonators	= ₹ 20 × (1,56,000 pcs - 1,18,400 pcs) = ₹ 7,52,000 (F)
Total	= ₹3,92,000 (F)

(iii) **Computation of material cost variance:**

Material cost variance	= Std. cost – Actual Cost
Or, (Std. Price × Std. Qty) – (Actual Price × Actual Qty.)	
SME	= (₹ 40 × 1,58,200 kg) – (₹ 38 × 1,67,200 kg.)
	= ₹ 63,28,000 – ₹ 63,53,600 = ₹ 25,600 (A)
Detonators	= (₹ 20 × 1,56,000 pcs) – (₹ 20.50 × 1,18,400 pcs)
	= ₹ 31,20,000 – ₹ 24,27,200 = 6,92,800 (F)
Total	= ₹ 6,67,200 (F)

6. (a) **Controllable costs and Uncontrollable 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.

Costs which cannot be influenced by the action of a specified member of an undertaking are known as uncontrollable costs.

- (b) **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.
- (c) In integrated accounting system cost and financial accounts are kept in the same set of books. Such a system will have to afford full information required for Costing as well as for Financial Accounts. In other words, information and data should be recorded in such a way so as to enable the firm to ascertain the cost (together with the necessary analysis) of each product, job, process, operation or any other identifiable activity. It also ensures the ascertainment of marginal cost, variances, abnormal losses and gains. In fact all information that management requires from a system of Costing for doing its work properly is made available. The integrated accounts give full information in such a manner so that the profit and loss account and the balance sheet can be prepared according to the requirements of law and the management maintains full control over the liabilities and assets of its business.

Since, only one set of books are kept for both cost accounting and financial accounting purpose so there is no necessity of reconciliation of cost and financial accounts .

- (d) The impact of IT in cost accounting may include the followings:
- (i) After the introduction of ERPs, different functional activities get integrated and as a consequence a single entry into the accounting system provides custom made reports for every purpose and saves an organisation from preparing different sets of documents. Reconciliation process of results of both cost and financial accounting systems become simpler and less sophisticated.
 - (ii) A move towards paperless environment can be seen where documents like Bill of Material, Material Requisition Note, Goods Received Note, labour utilisation report etc. are no longer required to be prepared in multiple copies, the related department can get e-copy from the system.
 - (iii) Information Technology with the help of internet (including intranet and extranet) helps in resource procurement and mobilisation. For example, production department can get materials from the stores without issuing material requisition note physically. Similarly, purchase orders can be initiated to the suppliers with the help of extranet. This enables an entity to shift towards Just-in-Time (JIT) approach of inventory management and production.
 - (iv) Cost information for a cost centre or cost object is ascertained with accuracy in timely manner. Each cost centre and cost object is codified and all related costs are assigned to the cost object or cost centre. This process automates the cost accumulation and ascertainment process. The cost information can be customised as per the requirement. For example, when an entity manufacture or provide services, it can know information job-wise, batch-wise, process-wise, cost centre wise etc.
 - (v) Uniformity in preparation of report, budgets and standards can be achieved with the help of IT. ERP software plays an important role in bringing uniformity irrespective of location, currency, language and regulations.
 - (vi) Cost and revenue variance reports are generated in real time basis which enables the management to take control measures immediately.
 - (vii) IT enables an entity to monitor and analyse each process of manufacturing or service activity closely to eliminate non value added activities.

The above are examples of few areas where Cost Accounting is done with the help of IT.