

Note: Question 1 is compulsory. Attempt any five from the rest.

Question 1 (5 Marks each)

(A) (5 marks)

Increase in hourly rate of wages under Rowan Plan is ₹ 30 i.e. (₹180 – ₹ 150)

$$\frac{\text{Time Saved}}{\text{Time Allowed}} \times ₹ 150 = ₹ 30 \text{ (Please refer Working Note)}$$

$$\text{Or, } \frac{\text{Time Saved}}{50 \text{ hours}} \times ₹ 150 = ₹ 30$$

$$\text{Or, Time saved} = \frac{1,500}{150} = 10 \text{ hours}$$

Therefore, Time Taken is 40 hours i.e. (50 hours – 10 hours)

Effective Hourly Rate under Halsey System:

Time saved = 10 hours

Bonus @ 50% = 10 hours × 50% × ₹ 150 = ₹ 750

Total Wages = (₹150 × 40 hours + ₹ 750) = ₹ 6,750

Effective Hourly Rate = ₹ 6,750 ÷ 40 hours = ₹ 168.75

Working Note:

$$\text{Effective hourly rate} = \frac{(\text{Time Taken} \times \text{Rate per hour}) + \frac{\text{Time Taken}}{\text{Time Allowed}} \times \text{Time Saved} \times \text{Rate per hour}}{\text{Time Taken}}$$

$$\text{Or, } ₹ 180 = \frac{\text{Time Taken} \times \text{Rate per hour}}{\text{Time Taken}} + \frac{\frac{\text{Time Taken}}{\text{Time Allowed}} \times \text{Time Saved} \times \text{Rate per hour}}{\text{Time Taken}}$$

$$\text{Or, } ₹ 180 - \frac{\text{Time Taken} \times \text{Rate per hour}}{\text{Time Taken}} = \frac{\text{Time Taken}}{\text{Time Allowed}} \times \text{Time Saved} \times \text{Rate per hour} \times \frac{1}{\text{Time Taken}}$$

$$\text{Or, } ₹ 180 - ₹ 150 = \frac{\text{Time Saved}}{\text{Time Allowed}} \times ₹ 150$$

B) (1,2,4 – 1 mark each, 3 – 2 marks)

(i) **Value of work in progress certified:**

Since, Cash Received of ₹ 2,50,000 is 80% of work certified

$$\text{Therefore, Value of work in progress certified} = \frac{\text{₹ 2,50,000}}{80\%} = \text{₹ 3,12,500}$$

(ii) **Degree of completion of contract:**

$$= \frac{\text{Value of work certified}}{\text{Value of contract}} \times 100 = \frac{\text{₹ 3,12,500}}{\text{₹ 5,00,000}} \times 100 = 62.5\%$$

(iii) **Notional Profit:**

$$\text{Profit transferred to Costing Profit \& Loss A/c} = \frac{2}{3} \times \text{Notional Profit} \times \frac{\text{Cash Received}}{\text{Value of work certified}}$$

(Since contract completion is 62.5% i.e. more than 50%)

$$\text{Or, ₹ 80,000} = \frac{2}{3} \times \text{Notional Profit} \times \frac{\text{₹ 2,50,000}}{\text{₹ 3,12,500}}$$

Notional Profit = ₹ 1,50,000

(iv) **Cost of contract as on 31-03-2017:**

= Value of Work certified + Cost of work uncertified – Notional profit

$$= \text{₹ 3,12,500} + \text{₹ 1,20,000} - \text{₹ 1,50,000}$$

$$= \text{₹ 2,82,500}$$

c)

Treatment of by-product cost in Cost Accounting:

(i) When they are of small total value, the amount realized from their sale may be dealt as follows:

(a) Sales value of the by-product may be credited to Costing Profit & Loss Account and no credit be given in Cost Accounting. The credit to Costing Profit & Loss Account here is treated either as a miscellaneous income or as additional sales revenue.

(b) The sale proceeds of the by-product may be treated as deduction from the total costs. The sales proceeds should be deducted either from production cost or cost of sales.

(ii) When they require further processing:

In this case, the net realizable value of the by-product at the split-off point may be arrived at by subtracting the further processing cost from realizable value of by-products. If the value is small, it may be treated as discussed in (i) above.

2 ½ marks
for each
point

D) (1 to 4 – 1 mark for each, 5,6 – ½ marks for each)

In the Books of Armaan Ltd			
Journal Entries under Integrated system of accounting			
Particulars		Amount in Rs.	Amount in Rs.
(i) Work-in-Progress Ledger Control A/	Dr	1,62,500	
Factory Overhead Control A/c	Dr	57,500	
To Stores Ledger Control A/c			2,20,000
(Being issue of Direct and Indirect materials)			
(ii) Work-in Progress Ledger Control A/c	Dr	2,76,250	
Factory Overhead control A/c	Dr	48,750	
To Wages Control A/c			3,25,000
(Being allocation of Direct and Indirect wages)			
(iii) Factory Overhead Control A/c	Dr	2,50,000	

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
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
To Cash/ Bank A/c		1,50,000
(Being payment made to creditors)		
(v) Cash/ Bank A/c	Dr	4,00,000
To Sundry Debtors A/c		4,00,000
(Being payment received from debtors)		

Question 2 (8 marks each)

5. A) Calculation of Cost of Production and Profit for the month ended April 2018: (8 marks)

Particulars	Amount (₹)	Amount (₹)
Materials consumed:		
- Opening stock	6,06,000	
- Add: Purchases	28,57,000	
	34,63,000	
- Less: Closing stock	(7,50,000)	27,13,000
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
Less: Sale of scrap		(26,000)
Cost of Production		83,96,000
Add: Opening stock of finished goods		6,06,000
Less: Closing stock of finished goods		(3,59,000)
Cost of Goods Sold		86,43,000
Office and administration expenses		10,34,000
Selling and distribution expenses		7,50,000
Cost of Sales		1,04,27,000
Profit (balancing figure)		29,73,000
Sales		1,34,00,000

(8 marks)

B) (2 marks for each)

(i) Contribution = ` 37.50 - ` 17.50 = ` 20 per unit.
Break even Sales Quantity = $\frac{\text{Fixed cost}}{\text{Contribution margin per unit}}$
(35,00,000 ÷ 20) units
=1,75,000 units
Cash Break even Sales Qty= $\frac{\text{Cash Fixed Cost}}{\text{Contribution margin per unit}}$
(20,00,000 ÷ 20) units
=1, 00,000 units.
(ii) P/V ratio = $\frac{\text{Contribution/ unit}}{\text{Selling Pr ice / unit}} \times 100$
(20/37.5x100)
`= 53.33 %
(iii) No. of units that must be sold to earn an Income (EBIT) of 2, 50,000
$\frac{\text{Fixed cost} + \text{Desired EBIT level}}{\text{Contribution margin per unit}}$
= $\frac{35,00,000 + 2,50,000}{20}$
= 1,87,500 units
(iv) After Tax Income (PAT) = `2, 50,000
Tax rate = 40%
Desired level of Profit before tax = $(2,50,000 / 60) \times 100 = 4,16,667$
Estimate Sales Level = $\frac{\text{FixedCost} + \text{DesiredPr ofit}}{\text{P / V ratio}}$
OR
Estimated Sales Level = $\frac{\text{Fixed Cost} + \text{Desired Profit}}{\text{Contribution per unit}} \times \text{S.P. p.u.}$
$(3500000+416667)/53.33\% = 73,43,750$

Question 3

A)

(a) Flexible Budget before marketing efforts: (4 marks)	Mixer(`)		Juicer (`)	
	6,000 units		9,000 units	
	Per unit	Total	Per unit	Total
Sales	120	7,20,000	78	7,02,000
Raw material cost	60	3,60,000	42	3,78,000
Direct labour cost per unit	30	1,80,000	18	1,62,000
Variable overhead per unit	12	72,000	6	54,000
Fixed overhead per unit				

	8	48,000	4	36,000
Total cost	110	6,60,000	70	6,30,000
Profit	10	60,000	8	72,000
(b) Flexible Budget after marketing efforts: (4 marks)				
	Mixer (‘)		juicer (‘)	
	7,500 units		9,500 units	
	Per unit	Total	Per unit	Total
Sales	120	9,00,000	78	7,41,000
Raw material cost	60	4,50,000	42	3,99,000
Direct labour cost per unit	30	2,25,000	18	1,71,000
Variable overhead per unit	13	99,000	7	62,700
Fixed overhead per unit	7	50,400	4	37,800
Total cost	110	8,24,400	71	6,70,500
Profit	10	75,600	7	70,500

B) The total production overheads are `26,00,000:

Product A: $10,000 \times ` 30 = ` 3,00,000$

Product B: $20,000 \times ` 40 = ` 8,00,000$

Product C: $30,000 \times ` 50 = 15,00,000$

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

Statement Showing "Activity Based Production Cost" (8 marks)

Activity Cost Pool	Cost Driver	Ratio	Total Amount (‘)	A (‘)	B (‘)	C (‘)
Stores Receiving	Purchase Requisition	6:9:10	2,96,000	71,040	1,06,560	1,18,400
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	Setups	12:13:15	12,00,000	3,60,000	3,90,000	4,50,000
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

Question 4 (8 marks each)

A)

Statement of Equivalent Production (Average Cost Method) - 2 Marks									
Particulars	Total Units	DM - 1		DM - 2		Labour		Overheads	
		%	Units	%	Units	%	Units	%	Units
Units completely processed	17,000	100	17,000	100	17,000	100	17,000	100	17,000
Normal Loss (10% of [20,000 units - 4,000 units]) (Refer WN)	1,800	-	-	-	-	-	-	-	-
Abnormal Gain	-800	100	-800	100	-800	100	-800	100	800
Closing Stock	4,000	100	4,000	80	3,200	60	2,400	40	1,600
	22,000		20,200		19,400		18,600		17,800

Statement of Cost – 2 Marks				
Particulars	Cost	Equivalent Units	Rate/Equivalent Units	
<u>Material 1</u>				
Op bal : 2,000 units	12,350			
Cost of 20,000 units @ Rs. 6/- p.u	1,20,000			
Less : Scrap realised (1,800 units x Rs. 4)	-7,200			
	1,25,150	20,200	6.1955	
<u>Material 2</u>				
Op Stock	13,200			
In Process 2	60,000			
	73,200	19,400	3.7732	
<u>Labour</u>				
Op Stock	17,500			
In Process 2				

	90,000				
	1,07,500	18,600	5.7796		
<u>Overheads</u>					
Op Stock	11,000				
In Process 2	95,000				
	1,06,000	17,800	5.9551		
			21.7034		
Statement of Evaluation - 1 Marks					
Cost of 17,000 finished goods units (17,000 x Rs. 21.7034)	3,68,957				
Cost of 800 abnormal units (800 x Rs. 21.7034)	17,363				
<u>Cost of 4,000 Closing WIP</u>					
DM - 1 (4,000 x Rs. 6.1955)	24,782				
DM - 2 (3,200 x Rs. 3.7732)	12,074				
DL (2,400 x Rs. 5.7796)	13,871				
Overheads (1,600 x Rs. 5.9551)	9,528				
	60,255				
	4,46,575				
Process 3 A/c - 1 Marks					
Particulars	Units	Rs.	Particulars	Units	Rs.
To Opening WIP	2,000	54,050	By Normal Loss	1,800	7,200
To Opening 2	20,000	1,20,000	By Finished goods units	17,000	3,68,957
To DM - 2		60,000	By Closing Balance	4,000	60,255
To Direct Labour		90,000			
To Overhead		95,000			
To Abnormal Gain	800	17,363			
	22,800	4,36,413		22,800	4,36,413

B)

(a) Statement of Profit under Absorption Costing :- (3 marks)			
Particulars	April	May	June
Sales (units)	4,600	4000	5400
Selling price per unit	2,000	2000	2000
Sales value (A)	92,00,000	80,00,000	1,08,00,000
Cost of Goods Sold:			
Opening Stock @ 1290	-	258000	1032000
Production cost @ 1290	61,92,000	59,34,000	70,95,000
Closing Stock @ 1290	(2,58,000)	(10,32,000)	(11,61,000)
Under/ (Over) absorption	1,20,000	1,40,000	50,000
Add: Fixed Selling Overheads	90,000	90,000	90,000
Cost of Sales (B)	61,44,000	53,90,000	71,06,000
Profit (A – B)	30,56,000	26,10,000	36,94,000
Workings:			
1. Calculation of full production cost			
Direct Materials (4 kg. × ` 110)	440		
Direct labour (6 hours × ` 50)	300		
Variable production Overhead (150% of ` 300)	450		
Total Variable cost	1,190		
Fixed production overhead (50,00,000 / 50000)	100		
	1,290		
2. Calculation of Opening and Closing stock			
	April	May	June
Opening Stock	-	200	800
Add: Production	4,800	4600	5500
Less: Sales	4,600	4000	5400
Closing Stock	200	800	900

3. Calculation of Under/Over absorption of fixed production overhead (1 mark)			
	April	May	June
Actual Overhead	6,00,000	6,00,000	6,00,000
Overhead absorbed	4,80,000	460000	550000
	(4800x 100)	(4600x 100)	(5500x100)
Under/(Over) absorption			
	1,20,000	1,40,000	50,000
(b) Statement of Profit under Marginal Costing:- (2 marks)			
	April	May	June
Sales (units)	4,600	4000	5400
Selling price per unit	2,000	2000	2000
Sales value	92,00,000	80,00,000	1,08,00,000
Less: Variable production cost	54,74,000	47,60,000	64,26,000
Contribution	37,26,000	32,40,000	43,74,000
Less: Fixed Production Overheads	6,00,000	6,00,000	6,00,000
Less: Fixed Selling Overheads	90,000	90,000	90,000
Profit	30,36,000	25,50,000	36,84,000
(c) Reconciliation of profit under Absorption costing to Marginal Costing :- (2 marks)			
	April	May	June
Profit under Absorption Costing	30,56,000	26,10,000	36,94,000
Add: Opening Stock	-	20,000	80,000
	(0 x100)	(100*200)	(100*800)
Less: Closing Stock	20,000	80,000	90,000
	(200x 100)	(800 x 100)	(900 x100)
Profit under Marginal Costing	30,36,000	25,50,000	36,84,000

Question 5

a. (1 mark for each point)

(i) Standard cost for Actual output:

$$\text{Material X} = 1,500 \text{ units} \times 2,000 \text{ kg.} \times ` 1 = 30,00,000$$

$$\text{Material Y} = 1,500 \text{ units} \times 800 \text{ kg.} \times ` 1.50 = \underline{18,00,000} ` 48,00,000$$

(ii) Material Cost Variance:

= Standard Cost for actual output – Actual Cost

= (SQ × SP) – (AQ × AP)

Material X = {30,00,000 - (31,00,000 kg. × ` 1.10)}

= 30,00,000 – 34,10,000 = 4,10,000 (A)

Material Y = {18,00,000 – (12,50,000 kg. × ` 1.60)}

= 18,00,000 – 20,00,000 = 2,00,000 (A) 6,10,000 (A)

(iii) Material Price Variance:

= AQ (SP – AP)

Material X = 31,00,000 kg. (` 1.00 – ` 1.10) = 3,10,000 (A)

Material Y = 12,50,000 kg. (` 1.50 – ` 1.60) = 1,25,000 (A) 4,35,000 (A)

(iv) Material Usage Variance:

= SP (SQ – AQ)

Material X = ` 1.00 {(1,500 × 2,000) – 31,00,000}

= 30,00,000 – 31,00,000 = 1,00,000 (A)

Material Y = ` 1.50 {(1,500 × 800) – 12,50,000}

= ` 1.50 (12,00,000 – 12,50,000) = 75,000 (A) = 1,75,000 (A)

3. (i) Amount of under/ over absorption of production overheads during the period of first six months of the year 2017-2018: (4 marks)

	Amount (`)	Amount (`)
Total production overheads actually incurred during the period		24,88,200
Less: Amount paid to worker as per court order	1,28,000	
Expenses of previous year booked in the current year	1,200	
Wages paid for the strike period under an award	44,000	
Obsolete stores written off	6,700	(1,79,900)
		23,08,300
Less: Production overheads absorbed as per machine hour rate (1,16,000 hours × ` 20*)		23,20,000
Amount of over absorbed production overheads		11,700

44,00,000

*Budgeted Machine hour rate (Blanket rate) = $\frac{44,00,000}{2,20,000 \text{ hours}}$ 20 per hour

(ii) Accounting treatment of over absorbed production overheads: (2 marks)

As, one fourth of the over absorbed overheads were due to defective production policies, this being abnormal, hence should be transferred to Costing Profit and Loss Account.

Amount to be transferred to Costing Profit and Loss Account = (11,700 × $\frac{1}{4}$) = ` 2,925

Balance of over absorbed production overheads should be distributed over Works in progress, finished goods and Cost of sales by applying supplementary rate*. Amount to be distributed = (11,700 × $\frac{3}{4}$) = ` 8,775

8,775

Supplementary rate = $\frac{8,775}{33,000 \text{ units}}$ 0.2659 per unit

(iii) Apportionment of under absorbed production overheads over WIP, Finished goods and Cost of sales: (2 marks)

(iv)	Equivalent completed units	Amount (₹)
Work-in-Progress (18,000 units × 50% × 0.2659)	9,000	2,393
Finished goods (2,400 units × 0.2659)	2,400	638
Cost of sales (21,600 units × 0.2659)	21,600	5,744
Total	33,000	8,775

Question 6

Calculation of Cost per annum (5 marks)

Particulars	Arts (₹)	Commerce (₹)	Science (₹)	Total (₹)
Teachers' salary (W.N-1)	16,80,000	21,00,000	25,20,000	63,00,000
R-apportionment of Economics & Mathematics teachers' salary (W.N- 2)	(84,000)	1,45,091	(61,091)	-
Principal's salary (W.N-3)	1,24,800	1,87,200	2,88,000	6,00,000
Lab assistants' salary (W.N-4)		-	1,72,800	1,72,800
Salary to library staff (W.N-5)	43,200	28,800	57,600	1,29,600
Salary to peons (W.N-6)	31,636	94,909	47,455	1,74,000
Salary to other staffs (W.N-7)	38,400	1,15,200	57,600	2,11,200
Examination expenses (W.N- 8)	86,400	2,59,200	1,29,600	4,75,200
Office & Administration expenses (W.N- 7)	1,21,600	3,64,800	1,82,400	6,68,800
Annual Day expenses (W.N-7)	36,000	1,08,000	54,000	1,98,000
Sports expenses (W.N- 7)	9,600	28,800	14,400	52,800
Total Cost per annum	20,87,636	34,32,000	34,62,764	89,82,400

(i) Calculation of cost per student per annum (1 mark)

Particulars	Arts (₹)	Commerce (₹)	Science (₹)	Total (₹)
Total Cost per annum	20,87,636	34,32,000	34,62,764	89,82,400
No. of students	120	360	180	660
Cost per student per annum	17,397	9,533	19,238	13,610

(ii) Calculation of profitability (1 mark)

Particulars	Arts (₹)	Commerce (₹)	Science (₹)	Total (₹)
Total Fees per annum	12,000	12,000	12,000	
Cost per student per annum	17,397	9,533	19,238	
Profit/ (Loss) per student per annum	(5,397)	2,467	(7,238)	
No. of students	120	360	180	
Total Profit/ (Loss)	(6,47,640)	8,88,120	(13,02,840)	(10,62,360)

Computation of fees to be charged to earn a 10% profit on cost (1 mark)

Particulars	Arts ([₹])	Commerce ([₹])	Science ([₹])
Cost per student per annum	17,397	9,533	19,238
Add: Profit @10%	1,740	953	1,924
Fees per annum	19,137	10,486	21,162
Fees per month	1,595	874	1,764

Working Notes:

(1) Teachers' salary

Particulars	Arts	Commerce	Science
No. of teachers	4	5	6
Salary per annum ([₹])	4,20,000	4,20,000	4,20,000
Total salary	16,80,000	21,00,000	25,20,000

(2) Re-apportionment of Economics and Mathematics teachers' salary

Particulars	Economics		Mathematics	
	Arts	Commerce	Science	Commerce
No. of classes	832	208	940	160
Salary re-apportionment ([₹])	(84,000)	84,000	(61,091)	61,091
	4,20,000 0 ----- 1,040	208	4,20,000 ----- 1,100	160

- (3) Principal's salary has been apportioned on the basis of time spent by him for administration of classes.
- (4) Lab attendants' salary has been apportioned on the basis of lab classes attended by the students.
- (5) Salary of library staffs are apportioned on the basis of time spent by the students in library.
- (6) Salary of Peons are apportioned on the basis of number of students. The peons' salary allocable to higher secondary classes is calculated as below:

	Amount ([₹])
Peon dedicated for higher secondary (1 peon × `10,000 × 12 months)	1,20,000
Add: 15% of other peons' salary {15% of (3 peons × `10,000 × 12 months)}	54,000
	1,74,000

- (7) Salary to other staffs, office & administration cost, Annual day expenses and sports expenses are apportioned on the basis of number of students.
- (8) Examination Expenses has been apportion taking number of students and number examinations into account.

B)

(i) Reorder Quantity (ROQ) = 1,196 kg. (Refer to working note)		(i) - 1 mark
(ii) Reorder level (ROL) = Maximum usage × Maximum re-order period		(ii) - 1 mark
450 kg. × 8 weeks = 3,600 kg.		(iii) - 2 marks
(iii) Maximum level = ROL + ROQ – (Min. usage × Min. re-order period)		(iv) - 2 marks

$3,600 \text{ kg.} + 1,196 \text{ kg.} - (100 \text{ kg.} \times 4 \text{ weeks}) = 4396 \text{ kg}$	(v) - 2 marks
(iv) Minimum level = ROL – (Normal usage × Normal re-order period)	
$3,600 \text{ kg.} - (275 \text{ kg.} \times 6 \text{ weeks}) = 1,950 \text{ kg.}$	
(v) Average stock level = (Maximum level + Minimum level)/2	
$(4,396 \text{ kg.} + 1,950 \text{ kg.})/2 = 3,173 \text{ kg.}$	
OR	
Minimum level + 1/2* ROQ	
$1,950 \text{ kg.} + 1/2 * 1,196 \text{ kg.} = 2,548 \text{ kg.}$	
Working Note	
Annual consumption of raw material (A) = (275 kg. × 52 weeks) = 14,300 kg.	
Cost of placing an order (O) = ` 100	
Carrying cost per kg. Per annum (c × i) = ` 10 × 20% = ` 2	
Economic order quantity (EOQ) = root of $[2AO/C*i]$ = root of $[(2 * 14,300 \text{ kgs.} * 100)/2]$ = 1196 kg(approx)	

Question 7

(a)

1. Job Costing
2. Batch Costing
3. Multiple Costing
4. Single or Output Costing

(1 mark for each point)

- (b) When the cost and financial accounts are kept separately, it is imperative that these should be reconciled, otherwise the cost accounts would not be reliable. The reconciliation of two set of accounts can be made, if both the sets contain sufficient detail as would enable the causes of differences to be located. It is therefore, important that in the financial accounts, the expenses should be analysed in the same way as in cost accounts. (2 marks)

Motivation for reconciliation is:

To ensure reliability of cost data

To ensure ascertainment of correct product cost

To ensure correct decision making by the management based on Cost & Financial data.

(2 marks)

(c)

Bills of Material	Material Requisition Note
1. It is document or list of materials prepared by the engineering/ drawing department.	1. It is prepared by the foreman of the consuming department.
2. It is a complete schedule of component parts and raw materials required for a particular job or work order.	2. It is a document authorizing Store-Keeper to issue material to the consuming department.
3. It often serves the purpose of a Store Requisition as it shows the complete schedule of materials required for a particular job i.e. it can replace stores requisition.	3. It cannot replace a bill of material.
4. It can be used for the purpose of quotation.	4. It is useful in arriving historical cost only.

5. It helps in keeping a quantitative control on materials draw through Stores Requisition.

5. It shows the material actually drawn from stores.

(1 mark for each point)

(d)

(i) Actual Quantity and Actual Price of material used (2 MARKS)

Material Price Variance = Actual Quantity (Std. Price – Actual Price) = Rs 51,000

Or, $AQ (SP - AP) = Rs\ 51,000$

Or, $10\ AQ = Rs\ 51,000$

Or, $AQ = 5,100\ kgs$

Actual cost of material used is given i.e.

$AQ \times AP = Rs\ 7,14,000$

Or, $5,100\ AP = Rs\ 7,14,000$

$AP = Rs\ 140$

Actual price is less by Rs 10

So, Standard Price = Rs 140 + Rs 10 = Rs 150 per kg

Actual Quantity = 5,100 kgs

Actual Price = Rs 140/kg

(ii) Material Usage Variance (1 mark)

Std. Price (Std. Quantity – Actual Quantity)

Or, $SP (SQ - AQ) = Rs\ 150 (1,000\ units \times 5\ kg - 5,100\ kg)$

= Rs 15,000 (A)

(iii) Material Cost Variance = Std. Cost – Actual Cost (1 mark)

= $(SP \times SQ) - (AP \times AQ)$

= $Rs\ 150 \times 5,000 - Rs\ 140 \times 5,100$

= $Rs\ 7,50,000 - Rs\ 7,14,000$

= Rs 36,000 (F)

OR

Material Price Variance + Material Usage Variance

= ` 51,000 (F) + ` 15,000 (A) = ` 36,000 (F)
