



J.K. SHAH[®]
TEST SERIES
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SUGGESTED SOLUTION

CA INTERMEDIATE NOV'19

SUBJECT- COSTING

Test Code - CIM 8359

BRANCH - () (Date :)

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ANSWER-1**Cost Ledger Control Account**

Dr.

Cr.

| | (Rs.) | | (Rs.) |
|-----------------------------|----------|---------------------------------------|----------|
| To Store Ledger Control A/c | 13,000 | By Opening Balance | 6,85,000 |
| To Balance c/d | 9,42,000 | By Store ledger control A/c | 1,25,000 |
| | | By Manufacturing Overhead Control A/c | 85,000 |
| | | By Wages Control A/c | 60,000 |
| | 9,55,000 | | 9,55,000 |

Stores Ledger Control Account

Dr.

Cr.

| | (Rs.) | | (Rs.) |
|----------------------------|----------|--------------------------------------|----------|
| To Opening Balance | 3,00,000 | By WIP Control A/c | 1,35,000 |
| To Cost ledger control A/c | 1,25,000 | By Cost ledger control A/c (Returns) | 13,000 |
| | | By Balance c/d | 2,77,000 |
| | 4,25,000 | | 4,25,000 |

WIP Control Account

Dr.

Cr.

| | (Rs.) | | (Rs.) |
|---------------------------------------|----------|----------------------------------|----------|
| To Opening Balance | 1,50,000 | By Finished Stock Ledger Control | 2,25,000 |
| To Wages Control A/c | 40,000 | By A/c Balance c/d | 1,85,000 |
| To Stores Ledger Control A/c | 1,35,000 | | |
| To Manufacturing Overhead Control A/c | 85,000 | | |
| | 4,10,000 | | 4,10,000 |

Finished Stock Ledger Control Account

Dr.

Cr.

| | (Rs.) | | (Rs.) |
|-------------------------------------|----------|------------------|----------|
| To Opening Balance | 2,50,000 | By Cost of Sales | 1,75,000 |
| To WIP Control A/c | 2,25,000 | By Balance c/d | 3,09,000 |
| To Cost of Sales A/c (Sales Return) | 9,000 | | |
| | 4,84,000 | | 4,84,000 |

Manufacturing Overhead Control Account

Dr.

Cr.

| | (Rs.) | | (Rs.) |
|----------------------------|----------|-----------------------|----------|
| To Cost Ledger Control A/c | 85,000 | By Opening Balance | 15,000 |
| To Wages Control A/c | 20,000 | By WIP Control A/c | 85,000 |
| | | By Under recovery c/d | 5,000 |
| | 1,05,000 | | 1,05,000 |

Wages Control Account

Dr.

Cr.

| | (Rs.) | | (Rs.) |
|--|--------|---------------------------------------|--------|
| To Transfer to Cost Ledger Control A/c | 60,000 | By WIP Control A/c | 40,000 |
| | | By Manufacturing Overhead Control A/c | 20,000 |
| | 60,000 | | 60,000 |

Cost of Sales Account

Dr.

Cr.

| | (Rs.) | | (Rs.) |
|--------------------------------------|----------|--------------------------------------|----------|
| To Finished Stock Ledger Control A/c | 1,75,000 | By Finished Stock Ledger Control A/c | 9,000 |
| | | By (Sales return) | 1,66,000 |
| | | Balance c/d | |
| | 1,75,000 | | 1,75,000 |

Trial Balance

| | (Rs.) | (Rs.) |
|------------------------------------|-----------------|-----------------|
| Stores Ledger Control A/c | 2,77,000 | |
| WIP Control A/c | 1,85,000 | |
| Finished Stock Ledger Control A/c | 3,09,000 | |
| Manufacturing Overhead Control A/c | 5,000 | |
| Cost of Sales A/c | 1,66,000 | |
| Cost ledger control A/c | ---- | 9,42,000 |
| | 9,42,000 | 9,42,000 |

(12 MARKS)

ANSWER-2

Statement of Reconciliation

| No. | Particulars | Amt. (Rs.) | Amt. (Rs.) |
|-----|-------------------------------|------------|------------|
| | Net loss as per Cost Accounts | | (35,400) |
| | Additions | | |
| 1. | Factory O/H over recovered | 1,35,000 | |
| 2. | Dividend Received | 20,000 | |
| 3. | Bank Interest received | 13,600 | |

| | | | |
|----------------------------------|---|--------|------------|
| 4. | Difference in value of Opening Stock (1,65,000 – 1,45,000) | 20,000 | 2,55,100 |
| 5. | Difference in Value of closing Stock (1,32,000 – 1,25,500) | 6,500 | |
| 6. | Notional Rent of own Premises | 60,000 | |
| Deductions | | | |
| 1. | Administration O/H under recovered | 25,500 | (1,51,900) |
| 2. | Depreciation under charged | 26,000 | |
| 3. | Loss due to obsolescence | 16,800 | |
| 4. | Income tax provided | 43,600 | |
| 5. | Goodwill written off | 25,000 | |
| 6. | Provision for doubtful debts | 15,000 | |
| Net Profit as per Financial A/c. | | | 67,800 |

(6 MARKS)

ANSWER-3

Journal entries are as follows:

| | DR. (Rs.) | CR. (Rs.) |
|--|-----------|-----------|
| Stores Ledger Control A/c..... Dr. | 2,00,000 | |
| To Payables (Creditors) A/c (Materials purchased) | | 2,00,000 |
| Work-in-Process Control A/c..... Dr. | 1,50,000 | |
| To Stores Ledger Control A/c (Materials issued to production) | | 1,50,000 |
| Wages Control A/c..... Dr. | 1,20,000 | |
| To Bank A/c (Wages paid) | | 1,20,000 |
| Factory Overhead Control A/c..... Dr. | 36,000 | |
| To Wages Control A/c (30% of wages paid being indirect charged to overhead) | | 36,000 |
| Work-in-Process Control A/c..... Dr. | 84,000 | |
| To Wages Control A/c (Direct wages charged to production) | | 84,000 |
| Factory Overhead Control A/c..... Dr. | 84,000 | |
| To Bank A/c (Manufacturing overhead incurred) | | 84,000 |
| Work-in-Process Control A/c..... Dr. | 92,000 | |
| To Factory Overhead Control A/c (Manufacturing overhead | | |

| | | |
|---|----------|-----------------|
| charged to production) | | 92,000 |
| Selling and Distribution Overhead Control A/c..... Dr. | 20,000 | |
| To Bank A/c | | 20,000 |
| (Selling and distribution costs incurred) | | |
| Finished Goods Control A/c Dr. | 2,00,000 | |
| To Work-in-Process Control A/c (Cost of finished goods) | | 2,00,000 |
| Cost of Sales A/c... Dr. | 2,20,000 | |
| To Finished Goods Control A/c | | 2,00,000 |
| To Selling and Distribution Control A/c (Costs of goods sold) | | 20,000 |
| Receivables (Debtors) A/c..... Dr. | 2,90,000 | |
| To Sales A/c (Finished stock sold) | | 2,90,000 |
| Bank A/c... Dr. | 69,000 | |
| To Receivables (Debtors) A/c (Receipts from receivables) | | 69,000 |
| Payables (Creditors) A/c... Dr. | 1,10,000 | |
| To Bank A/c | | 1,10,000 |
| (Payment made to payables) | | |

(8 MARKS)

ANSWER-4

(a) Material price variance :

$$= (\text{Standard price} - \text{Actual Price}) \times \text{Actual quantity}$$

$$= (\text{Rs. } 4 - \text{Rs. } 4.10) \times 5,000 = \text{Rs. } 500 \text{ Adv.}$$

(b) Material usage variance :

$$= (\text{Std. quantity for actual output} - \text{Actual qty.}) \times \text{Std. price}$$

$$= (600 \times 5 - 3,500) \times 4 = \text{Rs. } 2,000 \text{ Adv.}$$

(c) Labour Rate Variance :

$$= (\text{Standard rate} - \text{Actual rate}) \times \text{Actual hours}$$

$$= (\text{Rs. } 10 - \text{Rs. } 9) \times 1,700 = \text{Rs. } 1,700 \text{ Fav.}$$

(d) Labour Efficiency Variance :

$$= (\text{Standard hours for actual output} - \text{Actual hours}) \times \text{Standard rate}$$

$$= (600 \times 3 - 1,700) \times \text{Rs. } 10$$

$$= \text{Rs. } 1,000 \text{ Fav.}$$

(e) Variable Overhead Expenditure Variance

$$= (\text{Actual Hours} \times \text{Standard Rate}) - \text{Actual Overhead}$$

$$= (1,700 \times \text{Rs. } 1) - \text{Rs. } 1,900$$

- = Rs. 200 Adv.
- (f) Variable Overhead Efficiency Variance :
 = Std. hours of actual output – Actual hours) × Std. rate
 = (600 × 3 – 1,700) × Rs. 1 – Rs. 100 Fav.
- (g) Fixed Overhead Expenditure Variance :
 = (Budgeted Overhead – Actual overhead)
 = (1,800 × 0.50 – 900) = Nil
- (h) Fixed Overhead Volume Variance :
 = (Std. hours of actual output – Budgeted hours) × Std. rate
 = (600 × 3 – 1,800) × Rs. 0.50 = Nil
- (i) Fixed Overhead Capacity Variance :
 = (Budgeted hours – Actual Hours) × Standard rate
 = (1,800 – 1,700) × Rs. 0.50 = Rs. 50 Adv.
- (j) Fixed Overhead Efficiency Variances :
 = (Std. hours for actual output – Actual hours) × Standard rate
 = (600 × 3 – 1,700) × Rs. 0.50 = Rs. 50 Fav.

| Verification : | (Rs.) | (Rs.) |
|---|--------------|--------------|
| Overhead recovered : 600 units @ Rs. 4.50 | | 2,700 |
| Actual Overhead : | | |
| Variable | 1,900 | |
| Fixed | 900 | 2,800 |
| | | 100 Adv. |
| Variable expenditure variance | | 200 Adv. |
| Variable Efficiency variance | | 100 Fav. |
| Fixed expenditure variance | | NIL |
| Fixed overhead volume variance | | NIL |
| | | 100 Adv |

Reconciliation Statement

| | | | |
|--|-----------|------------|----------|
| Standard Cost : 600 units @ Rs. 54.50 | | 32,700 | |
| Actual Cost : | 38,600 | | |
| Less : Material Stock at standard cost : (1,500 × Rs. 4) | 6,000 | (32,600) | 100 Fav. |
| Variances : | Adv.(Rs.) | Fav. (Rs.) | |
| Material Price | 500 | | |
| Material usage | 2,000 | | |
| Labour rate | | 1,700 | |
| Labour efficiency | | 1,000 | |
| Variable expenditure | 200 | | |
| Variable efficiency | | 100 | |
| Total | 2,700 | 2,800 | 100 Fav. |

(10 marks)

ANSWER-5

A.

(i) **Actual Quantity and Actual Price of material used**

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 x 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**

Std. Price (Std. Quantity – Actual Quantity)

Or, SP (SQ – AQ) = Rs. 150 (1,000 units x 5 kg – 5,100 kg)

= Rs. 15,000 (A)

(iii) **Material Cost Variance** = Std. Cost – Actual Cost

= (SP x SQ) – (AP x AQ)

= Rs. 150 x 5,000 – Rs. 140 x 5,100

= Rs. 7,50,000 – Rs. 7,14,000

= Rs. 36,000 (F)

OR

Material Price Variance + Material Usage Variance

Rs. 51,000 (F) + Rs.15,000 (A)= Rs. 36,000 (F)

(3*2 = 6 marks)

B. Working Note:

Table Showing Standard & Actual Cost

| Worker | Standard Hours (a) | Standard Rate per Hour (b) | Standard Cost for Actual Output (c) = (a x b) | Actual Hours Paid (d) | Actual Rate per hour (e) | Actual Cost (f) = (d) x (e) | Idle time (g) | Actual hours worked (h)=(d)-(g) |
|---------------|--|-----------------------------------|--|--|---------------------------------|------------------------------------|---------------------------------------|---|
| Skilled | 2,340 hrs. [(65 Workers x 40 hrs.) / 2,000 units] x 1,800 units | Rs. 45 | Rs.1,05,300 | 2,000 hrs. (50 Workers x 40 hrs.) | Rs. 50 | Rs.1,00,000 | 100 hrs. (50 Workers x 2 hrs.) | 1,900 hrs. (2,000 hrs.-100 hrs.) |
| Semi- skilled | 720 hrs. [(20 Workers x 40 hrs.) / 2,000 units] x 1,800 units | Rs.30 | Rs.21,600 | 1,200 hrs. (30 Workers x 40 hrs.) | Rs.35 | Rs.42,000 | 60 hrs. (30 Workers x 2 hrs.) | 1,140 hrs. (1,200 hrs.-60 hrs.) |
| Unskilled | 540 hrs. [(15 Workers x 40 hrs.) / 2,000 units] x 1,800 units | Rs.15 | Rs.8,100 | 800 hrs. (20 Workers x 40 hrs.) | Rs.10 | Rs.8,000 | 40 hrs. (20 Workers x 2 hrs.) | 760 hrs. (800 hrs.-40 hrs.) |
| Total | 3,600 hrs. | | Rs.1,35,000 | 4,000 hrs. | | Rs.1,50,000 | 200 hrs. | 3,800 hrs. |

Calculation of Variances

- (i) Labour Cost Variance = Standard Cost for actual output – Actual cost
- Skilled worker = Rs. 1,05,300 - Rs. 1,00,000
= Rs. 5,300 (F)
- Semi-skilled worker = Rs. 21,600 - Rs. 42,000
= Rs. 20,400 (A)
- Unskilled Worker = Rs. 8,100 - Rs. 8,000
= Rs. 100 (F)
- Total = Rs. 5,300 (F) + Rs. 20,400 (A) + Rs. 100 (F)
= Rs. 15,000 (A)

(ii) Labour Efficiency Variance = Std. Rate x (Standard hours – Actual hours worked)

$$\begin{aligned} \text{Skilled worker} &= \text{Rs. } 45 \times (2,340 \text{ hrs.} - 1,900 \text{ hrs.}) \\ &= \text{Rs. } 19,800 \text{ (F)} \end{aligned}$$

$$\begin{aligned} \text{Semi-skilled worker} &= \text{Rs. } 30 \times (720 \text{ hrs.} - 1,140 \text{ hrs.}) \\ &= \text{Rs. } 12,600 \text{ (A)} \end{aligned}$$

$$\begin{aligned} \text{Unskilled Worker} &= \text{Rs. } 15 \times (540 \text{ hrs.} - 760 \text{ hrs.}) \\ &= \text{Rs. } 3,300 \text{ (A)} \end{aligned}$$

$$\begin{aligned} \text{Total} &= \text{Rs. } 19,800 \text{ (F)} + \text{Rs. } 12,600 \text{ (A)} + \text{Rs. } 3,300 \text{ (A)} \\ &= \text{Rs. } 3,900 \text{ (F)} \end{aligned}$$

(iii) Labour Idle Time Variance = Std. Rate x Idle Time (Hrs.)

$$\begin{aligned} \text{Skilled worker} &= \text{Rs. } 45 \times 100 \text{ hrs.} \\ &= \text{Rs. } 4,500 \text{ (A)} \end{aligned}$$

$$\begin{aligned} \text{Semi-skilled worker} &= \text{Rs. } 30 \times 60 \text{ hrs.} \\ &= \text{Rs. } 1,800 \text{ (A)} \end{aligned}$$

$$\text{Unskilled worker} = \text{Rs. } 15 \times 40 \text{ hrs.} = \text{Rs. } 600 \text{ (A)}$$

$$\begin{aligned} \text{Total} &= \text{Rs. } 4,500 \text{ (A)} + \text{Rs. } 1,800 \text{ (A)} + \text{Rs. } 600 \text{ (A)} \\ &= \text{Rs. } 6,900 \text{ (A)} \end{aligned}$$

(8 marks)