**Problem 1:**

**Product A passes through two processes I and II and then to Finished Stock. From the following data prepare the Process A/c's:**

| *Particulars* | *Process I* | *Process II* |
|---|---|---|
| Input | 2,000 | 1,900 |
| Material consumed | 30,000 | 20,000 |
| Wages | 20,000 | 20,000 |
| Overhead | 7,200 | 6,170 |
| Normal Loss | 5% | 10% |
| Scrap Value (per unit) | 2 | 3 |

## Process I A/c

*Dr.* *Cr.*

| *Particulars* | *Units* | *Rate* | *Amount Rs.* | *Particulars* | *Units* | *Rate* | *Amount Rs.* |
|---|---|---|---|---|---|---|---|
| To Material | 2,000 | — | 30,000 | By Normal Loss | 100 | 2 | 200 |
| " D/Wages | — | — | 20,000 | " Process II A/c | 1,900 | 30 | 57,000 |
| " Overhead | — | — | 7,200 | | | | |
| | 2,000 | — | 57,200 | | 2,000 | — | 57,200 |

$$\text{Cost per unit} = \frac{57,000 - 200}{2,000 - 100} = \frac{57,000}{1,900} = \text{Rs. } 30$$

## Process II A/c

*Dr.* *Cr.*

| *Particulars* | *Units* | *Rate* | *Amount Rs.* | *Particulars* | *Units* | *Rate* | *Amount Rs.* |
|---|---|---|---|---|---|---|---|
| To Process I A/c | 1,900 | 30 | 57,000 | By Normal Loss | 190 | 3 | 570 |
| " Material | — | — | 20,000 | " Finished Stock | 1,710 | 60 | 1,02,600 |
| " Wages | — | — | 20,000 | | | | |
| " Overhead | | | 6,170 | | | | |
| | 1,900 | — | 1,03,170 | | 1,900 | — | 1,03,170 |

$$\text{Cost per unit} = \frac{1,03,170 - 570}{1,900 - 190} = \frac{1,02,600}{1,710} = \text{Rs. } 60$$

- . Mukherjee & Co. produces an article through two processes X and Y which is then sent to the finished stock.
- **The details of the processes are:**

| | *Process X* | *Process Y* |
|---|---|---|
| Material used | 60,000 | 30,000 |
| Wages | 70,000 | 40,000 |
| Overhead | 20,000 | 40,000 |
| Normal loss | 5% | 10% |
| Scrap value (Per 100 units) | 80 | 100 |
| Output (units) | 9,500 | 8,500 |

10,000 units were brought into Process @ Rs. 10 per unit.

Prepare Process A/cs.

## Process I A/c

*Dr.* *Cr.*

| *Particulars* | *Units* | *Rate* | *Amount Rs.* | *Particulars* | *Units* | *Rate* | *Amount Rs.* |
|---|---|---|---|---|---|---|---|
| To Input | 10,000 | 10 | 1,00,000 | By Normal Loss | 500 | 0·80 | 400 |
| " Material | — | — | 60,000 | " Process II A/c | 9,500 | 26·27 | 2,49,600 |
| " Wages | — | — | 70,000 | | | | |
| " Overhead | — | — | 20,000 | | | | |
| | 10,000 | | 2,50,000 | | 10,000 | | 2,50,000 |

$$\text{Cost per unit} = \frac{2,49,600}{9,500} = \text{Rs. } 26{\cdot}27$$

## Process II A/c

*Dr.* *Cr.*

| *Particulars* | *Units* | *Rate* | *Amount Rs.* | *Particulars* | *Units* | *Rate* | *Amount Rs.* |
|---|---|---|---|---|---|---|---|
| To Process I | 9,500 | 26·27 | 2,49,600 | By Normal Loss | 950 | 1·00 | 950 |
| " Material | — | — | 30,000 | " Abnormal Loss | 50 | 41·947 | 2,097 |
| " Wages | — | — | 40,000 | " Finished Stock | 8,500 | 41·947 | 3,56,553 |
| " Overhead | — | — | 40,000 | | | | |
| | 9,500 | | 3,59,600 | | 9,500 | — | 3,59,600 |

$$\text{Cost per unit} = \frac{3,59,600 - 950}{9,500 - 950} = \frac{3,58,650}{8,550} = \text{Rs. } 41{\cdot}947$$

- **Cost Accounting Problems on Normal Loss, Abnormal Loss and Abnormal Gain (1 Problem):**
- **Illustration 1:**
- **The following are the details of Process X, Process Y and Process Z:**
-

| | *Process* X | *Process* Y | *Process* Z |
|---|---|---|---|
| Input units | 2,000 | 1,840 | 1,740 |
| Normal loss unit | 10% | 5% | 10% |
| Direct Material | 40,000 | 60,400 | 69,240 |
| Wages | 70,000 | 84,520 | 1,00,000 |
| Overhead | 30,000 | 40,000 | 50,000 |
| Scrap value (per unit) | 25 | 50 | 60 |

Output of Process Z is 1,600 units. Prepare the necessary Accounts.

- Stock in process is valued at Prime Cost and Finished stock at the price at which it is received from process III.
- Find out the amount of provision to be made to offset the inter-process profits added.
-

## Process X A/c

*Dr.* *Cr.*

| *Particulars* | *Units* | *Rate* | *Amount Rs.* | *Particulars* | *Units* | *Rate* | *Amount Rs.* |
|---|---|---|---|---|---|---|---|
| To Direct Material | 2,000 | — | 40,000 | By Normal Loss | 200 | 25 | 5,000 |
| " Wages | — | — | 70,000 | " Processing | 1,840 | 75 | 1,38,000 |
| " Overhead | — | — | 30,000 | | | | |
| | 2,000 | — | 1,40,000 | | | | |
| To Abnormal Gain | 40 | 75 | 3,000 | | | | |
| | 2,040 | — | 1,43,000 | | 2,040 | | 1,43,000 |

$$\text{Cost Per unit} = \frac{1,40,000 - 5,000}{2,000 - 200} = \frac{1,35,000}{1,800}$$

## Process Y A/c

*Dr.* *Cr.*

| *Particulars* | *Units* | *Rate* | *Amount Rs.* | *Particulars* | *Units* | *Rate* | *Amount Rs.* |
|---|---|---|---|---|---|---|---|
| To Process X | 1,840 | 75 | 1,38,000 | By Normal Loss | 72 | 50 | 3,600 |
| " D/M | — | — | 60,400 | " Process 'Z' | 1,740 | 180·61 | 3,14,263 |
| " Wages | — | — | 84,520 | " Ab. Loss | 28 | 180·61 | 5,057 |
| " Overhead | — | — | 40,000 | | | | |
| | 1,840 | — | 3,22,920 | | 1,840 | | 3,22,920 |

## Process Z A/c

*Dr.* *Cr.*

| *Particulars* | *Units* | *Rate* | *Amount Rs.* | *Particulars* | *Units* | *Rate* | *Amount Rs.* |
|---|---|---|---|---|---|---|---|
| To Processing | 1,740 | 180·61 | 3,14,263 | By Normal Loss | 174 | 60 | 10,440 |
| " Material | — | — | 69,240 | " Finished stock | 1,600 | 334 | 5,34,420 |
| " Labour | — | — | 1,00,000 | | | | |
| " Overhead | — | — | 50,000 | | | | |
| | 1,740 | — | 5,33,503 | | | | |
| To Abnormal Gain | 34 | 334 | 11,357 | | | | |
| | 1,774 | — | 5,44,860 | | 1,774 | — | 5,44,860 |

## Normal Loss

*Dr.* *Cr.*

| *Particulars* | *Units* | *Rate* | *Amount Rs.* | *Particulars* | *Units* | *Rate* | *Amount Rs.* |
|---|---|---|---|---|---|---|---|
| To Process X | 200 | 25 | 5,000 | By C.L.C | 160 | 25 | 4,000 |
| " Process Y | 72 | 50 | 3,600 | " Abnormal gain | 40 | 25 | 1,000 |
| " Process Z | 174 | 60 | 10,440 | " C.L.C. | 72 | 50 | 3,600 |
| | | | | " C.L.C. | 140 | 60 | 8,400 |
| | | | | " Ab. Gain | 34 | 60 | 2,040 |
| | 446 | — | 19,040 | | 446 | — | 19,040 |

## Abnormal Gain A/c

*Dr.* *Cr.*

| *Particulars* | *Units* | *Rate* | *Amount Rs.* | *Particulars* | *Units* | *Rate* | *Amount Rs.* |
|---|---|---|---|---|---|---|---|
| To Normal Loss | 40 | 25 | 1,000 | By Process X | 40 | 75 | 3,000 |
| " Normal Loss | 34 | 60 | 2,040 | " Process Z | 34 | 334 | 11,357 |
| " Costing P/L | — | — | 11,317 | | | | |
| | 74 | — | 14,357 | | 74 | — | 14,357 |

## Abnormal Loss A/c

*Dr.* *Cr.*

| *Particulars* | *Units* | *Rate* | *Amount Rs.* | *Particulars* | *Units* | *Rate* | *Amount Rs.* |
|---|---|---|---|---|---|---|---|
| To Processing | 28 | 180·61 | 5,057 | By C.L.C | 28 | 50 | 1,400 |
| | | | | " Costing P/L A/c | — | — | 3,657 |
| | 28 | — | 5,057 | | 28 | — | 5,057 |