

**Marudhar Kesari Jain College for Women (Autonomous)**  
**Vaniyambadi**

**Class: III B.Com**

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**Subject: Cost Accounting-II**

**Subject Code: FCM 61**

**UNIT-II**

Process Costing : Definition – Features – Job Vs Process Costing – Process Account – Losses – By Products and Joint Products – WIP – Equivalent Units and its Calculation - Closing WIP with or without Process Loss.

**INTRODUCTION**

Process Costing is a method of costing used in industries where the material has to pass through two or more processes for being converted into a final product. It is defined as “a method of Cost Accounting whereby costs are charged to processes or operations and averaged over units produced”. A separate account for each process is opened and all expenditure pertaining to a process is charged to that process account. Such type of costing method is useful in the manufacturing of products like steel, paper, medicines, soaps, chemicals, rubber, vegetable oil, paints, varnish etc. where the production process is continuous and the output of one process becomes the input of the following process till completion.

**Basic features**

Industries, where process costing can be applied, have normally one or more of the following features:

1. Each plant or factory is divided into a number of processes, cost centres or departments, and each such division is a stage of production or a process.
2. Manufacturing activity is carried on continuously by means of one or more process run sequentially, selectively or simultaneously.
3. The output of one process becomes the input of another process.
4. The end product usually is of like units not distinguishable from one another.
5. It is not possible to trace the identity of any particular lot of output to any lot of input materials. For example, in the sugar industry, it is impossible to trace any lot of sugar bags to a particular lot of sugarcane fed or vice versa.
6. Production of a product may give rise to Joint and/or By-Products.

The Cost of each process comprises the cost of:

- (i) Materials
- (ii) Employee Cost (Labour)
- (iii) Direct expenses, and
- (iv) Overheads of production.

**Materials** - Materials and supplies which are required for each process are drawn against Material Requisitions Notes from the stores. Each process for which the materials are used, are debited with the cost of materials consumed on the basis of the information received from the Cost Accounting department. The finished product of first process generally become the raw materials of second process; under such a situation the account of second

process is debited with the cost of transfer from the first process and also with the cost of any additional material used in process.

**Employee Cost (Labour)-** Each process account should be debited with the labour cost or wages paid to labour for carrying out the processing activities. Sometimes the wages paid are apportioned over the different processes after selecting appropriate basis.

**Direct expenses-** Each process account should be debited with direct expenses like depreciation, repairs, maintenance, insurance etc. associated with it.

**Production Overheads-** Expenses like rent, power expenses, lighting bills, gas and water bills etc. are known as production overheads. These expenses cannot be allocated to a process. The suitable way out to recover them is to apportion them over different processes by using suitable basis. Usually, these expenses are estimated in advance and the processes debited with these expenses on a pre-determined basis.

### **Difference between Job Costing and Process Costing:**

|         | <b>Job Costing</b>  | <b>Process Costing</b>  |
|---------|---|---|
| (i)     | The form of specific order costing which applies where the work is undertaken to customer's special requirements. | That form of costing which applies where standardised goods are produced and production is in continuous flow, the products being homogeneous.        |
| (ii)    | The job is the cost unit and costs are collected for each job.  | Costs are collected by process or department on time basis and divided by output for a period to get an average cost per unit.                        |
| (iii)   | Losses are generally not segregated.  | Normal losses are carefully predetermined and abnormal losses are segregated.   |
| (iv)    | Overheads are allocated and apportioned to cost centres then absorbed by jobs, in proportion to the time taken.   | Units pass through the same processes. Overheades are apportioned to processes on some suitable basis, some times, pre-determined rates may be used   |
| (v)     | Joint products / By-products do not usually arise in jobbing work.  | Joint products/By-products do arise and joint cost apportionment is necessary.  |
| (vi)    | Standard costing is generally not suitable for jobbing work.  | The standardised nature of products and processing methods lends itself to the adoption of standard costing.  |
| (vii)   | Work-in-progress valuation is specific and is obtained from analysis of outstanding jobs.                         | For WIP valuation operating costs have to be spread over fully complete output and partially complete products using the concept of equivalent units. |
| (viii ) | Each job is separate and independent of others. Costs are computed when a job is complete.                        | Products lose their individual identity as they are manufactured in a continuous flow. Costs are calculated at the end of cost period.                |
| (ix)    | There are usually no transfers from one job to another unless there is a surplus work or excess production.       | Transfer of costs from one process to another is made, as the product moves from one process to another.  |
| (x)     | There may or may not be work-in-progress at the beginning or end of the accounting period.                        | There is always some work-in-process at the beginning as well as at the end of the accounting period.   |
| (xi)    | Proper control is comparatively difficult as each product unit is different and the                               | Proper control is comparatively easier, as the production is standardised and is more stable.   |

|       |                                     |   |
|-------|-------------------------------------|---|
|       | production is not continuous.       |   |
| (xii) | It requires more forms and details. | It requires few forms and less details. |

### **TREATMENT OF NORMAL, ABNORMAL LOSS AND ABNORMAL GAIN**

Loss of material is inherent during processing operation. The loss of material under different processes arises due to reasons like evaporation or a change in the moisture content etc. Process loss is defined as the loss of material arising during the course of a processing operation and is equal to the difference between the input quantity of the material and its output.

There are two types of material losses viz. (i) Normal loss and (ii) Abnormal loss.

#### **(i) Normal Process Loss:**

It is also known as normal wastage. It is defined as the loss of material which is inherent in the nature of work. Such a loss can be reasonably anticipated from the nature of the material, nature of operation, the experience and technical data. It is unavoidable because of nature of the material or the process. It also includes units withdrawn from the process for test or sampling.

**Treatment in Cost Accounts :** The cost of normal process loss in practice is absorbed by good units produced under the process. The amount realised by the sale of normal process loss units should be credited to the process account.

#### **Abnormal Process Gain/ Yield**

Sometimes, loss under a process is less than the anticipated normal figure. In other words, the actual production exceeds the expected figures. Under such a situation the difference between actual and expected loss or actual and expected production is known as abnormal gain or yield. So abnormal gain may be defined as an unexpected gain in production under the normal conditions. This arises due to over- estimation of process loss, improvements in work efficiency of workers, use of better technology in production etc.

**Treatment in Cost Accounts :** The process account under which abnormal gain arises is debited with the abnormal gain and credited to abnormal gain account which will be closed by transferring to the Costing Profit and Loss account. The cost of abnormal gain is computed on the basis of normal production.

### **VALUATION OF WORK IN PROCESS**

In the case of process type of industries, it is possible to determine the average cost per unit by dividing the total cost incurred during a given period of time by the total number of units produced during the same period. But this is hardly the case in most of the process type industries where manufacturing is a continuous activity. The reason is that the cost incurred in such industries represents the cost of work carried on opening work-in-process, closing work-in-process and completed units. Thus to ascertain the cost of each completed unit, it is necessary to ascertain the cost of work-in-process in the beginning and at the end of the process.

The valuation of work-in-process presents a good deal of difficulty because it has units under different stages of completion from those in which work has just begun to those which are only a step short of completion. Work-in-process can be valued on actual basis, i.e., materials used on the unfinished units and the actual amount of labour expenses involved. However,

the degree of accuracy in such a case cannot be satisfactory. An alternative method is based on converting partly finished units into equivalent finished units.

### **Equivalent Units**

Equivalent units or equivalent production units, means converting the incomplete production units into their equivalent completed units. Under each process, an estimate is made of the percentage completion of work-in-process with regard to different elements of costs, viz., material, labour and overheads. It is important that the estimate of percentage of completion should be as accurate as possible.

Equivalent completed units = Actual number of units in × Percentage of the process of manufacture work completed

### **STEPS IN PROCESS COSTING**

For each production process, a Production Cost Report is prepared at the end of each accounting period. The objective of preparing the report is to know physical units and equivalent units in process, element wise cost of goods produced and transferred goods in process (work-in-process), units lost due to abnormal reasons i.e. abnormal loss etc. To prepare the report, the following steps are generally followed:

#### **Step-1: Analyse the Physical Flow of Production Units**

The first step is to determine and analyse the number of physical units in the form of inputs (introduced fresh or transferred from previous process, beginning work-in-process) and outputs (completed and work-in-process).

#### **Step-2: Calculate Equivalent Units for each Cost Elements**

The second step is to calculate equivalent units of production for each cost element i.e. for material, labour and overheads. It is calculated by taking the extent of work done in respect of each element.

#### **Step-3: Determine Total Cost for each Cost Element**

Total cost for each cost element is collected and accumulated for the period. The process of cost collection has already been discussed.

#### **Step-4: Compute Cost Per Equivalent Unit for each Cost Element**

In this step, the cost per equivalent unit for each cost element is calculated. The total cost as calculated in Step-3 is divided by the equivalent units as determined in Step-2.

#### **Step-5: Assign Total Costs to Units Completed and Ending WIP**

In this step, the total cost for units completed, units transferred to next process, ending work in process, abnormal loss etc. is calculated and posted in the process account and production cost report.

### **INTER-PROCESS PROFITS**

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.

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.

**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.

1. Prepare process accounts from the following details:

|                   | I     | II    |
|-------------------|-------|-------|
| Materials         | 40000 | 6000  |
| Labour            | 15000 | 16000 |
| Expenses (Direct) | 5000  | 3000  |

Production overhead Rs. 60000 to be allocated to Process I and II on the basis of 150% of Direct wages. Production during the period 2000 units.

**SOLUTION:****PROCESS I ACCOUNT**

| Particulars          | Units | Rs.          | Particulars                  | Units | Rs.          |
|----------------------|-------|--------------|------------------------------|-------|--------------|
| To Materials         | 2000  | 40000        |                              |       |              |
| To Labour            |       | 15000        |                              |       |              |
| To Direct Expenses   |       | 5000         | By Transfer to Process II    | 2000  | 82500        |
| To Product Overheads |       | 22500        | (82500/2000 = <b>41.25</b> ) |       |              |
| (15000x150%)         |       |              |                              |       |              |
|                      |       | <b>82500</b> |                              |       | <b>82500</b> |

**PROCESS II ACCOUNT**

| Particulars              | Units | Rs.           | Particulars                   | Units | Rs.           |
|--------------------------|-------|---------------|-------------------------------|-------|---------------|
| To Transfer from Process | 2000  | 82500         | By finished stock             | 2000  | 131500        |
| To Materials             |       | 6000          | (131500/2000 = <b>65.75</b> ) |       |               |
| To Labour                |       | 16000         |                               |       |               |
| To Direct Expenses       |       | 3000          |                               |       |               |
| To Production Overheads  |       | 24000         |                               |       |               |
| (16000x150%)             |       |               |                               |       |               |
|                          |       | <b>131500</b> |                               |       | <b>131500</b> |

2. From the following figures show the cost of the three processes. The production of each process is passed on the next till completion:

|  | Process A<br>Rs. | Process B<br>Rs. | Process C<br>Rs. |
|--|------------------|------------------|------------------|
| Wages and materials                            | 60800            | 24000            | 58500            |
| Works on cost                                  | 11200            | 10500            | 12000            |
| Production (in units)                          | 72000            | 75000            | 96000            |
| Stock (units from preceding process 1/7/2007)  | -                | 8000             | 33000            |
| Stock (units from preceding process 31/7/2007) | -                | 2000             | 11000            |

**SOLUTION:****PROCESS A ACCOUNT**

| Particulars            | Units | Rs.          | Particulars              | Units | Rs.          |
|------------------------|-------|--------------|--------------------------|-------|--------------|
| To Wages and materials | 72000 | 60800        | By Transfer to Process B | 72000 | 72000        |
| To Works cost          |       | 11200        |                          |       |              |
|                        |       | <b>72000</b> |                          |       | <b>72000</b> |

**PROCESS B ACCOUNT**

| Particulars                | Units        | Rs.           | Particulars                                     | Units        | Rs.           |
|----------------------------|--------------|---------------|---|--------------|---------------|
| To Transfer from Process A | 72000        | 72000         | By Wastage                                      | <b>3000</b>  |               |
| To Opening stock           | 8000         | 8000          | By Closing Stock                                | 2000         | 2000          |
| To Wages and materials     |              | 24000         | By Transfer to Process C ( $112500/75000=1.5$ ) | 75000        | 112500        |
| To Works on cost           |              | 10500         |   |              |               |
|                            | <b>80000</b> | <b>114500</b> |   | <b>80000</b> | <b>114500</b> |

**PROCESS C ACCOUNT**

| Particulars                             | Units         | Rs.           | Particulars                               | Units         | Rs.           |
|---|---------------|---------------|---|---------------|---------------|
| To Transfer from Process B              | 7500          | 112500        | By Wastage                                | <b>1000</b>   |               |
| To Opening Stock ( $33000 \times 1.5$ ) | 33000         | 49500         | By Closing Stock ( $1000 \times 1.5$ )    | 11000         | 16500         |
| To Wages and Materials                  |               | 58500         | By Finished Stock ( $216000/96000=2.25$ ) | 96000         | 216000        |
| To Works on Cost                        |               | 12000         |   |               |               |
|   | <b>108000</b> | <b>232500</b> |   | <b>108000</b> | <b>232500</b> |

3. From the following information you are required to prepare process accounts:

|                                  | Rs.   |
|----------------------------------|-------|
| Material Consumed                | 12000 |
| Direct labour                    | 14000 |
| Manufacturing expenses           | 4000  |
| Input in Process A (10000 units) | 10000 |

Output (9400 units) Value of normal wastage Rs. 8 per 100 units.

**SOLUTION:****PROCESS ACCOUNT**

| Particulars           | Units        | Rs.          | Particulars                      | Units        | Rs.          |
|-----------------------|--------------|--------------|----------------------------------|--------------|--------------|
| To Input              | 10000        | 10000        | By Normal Wastage<br>(8/100x600) | 600          | 48           |
| To Material Consumed  |              | 12000        | By Finished stock                | 9400         | 39952        |
| To Direct labour      |              | 14000        | (39952/9400= <b>4.25</b> )       |              |              |
| To Manufacturing exp. |              | 4000         |                                  |              |              |
|                       | <b>10000</b> | <b>40000</b> |                                  | <b>10000</b> | <b>40000</b> |

4. A product passes through three processes A, B and C 10000 units at re. 1 per unit were issued to process 'A'. The others direct expenses were;

|                  | Process A<br>Rs. | Process B<br>Rs. | Process C<br>Rs. |
|------------------|------------------|------------------|------------------|
| Sundry materials | 1000             | 1500             | 1480             |
| Direct labour    | 5000             | 8000             | 6500             |
| Direct expenses  | 1050             | 1188             | 1605             |

The wastage of process A was 5% process B 4% and process 5%. The wastage of process A was sold at Rs. 0.25 per unit, that of B at Re. 0.50 per unit and that of C at Re. 1 per unit. The overhead charges were 168% of direct labour. The final product was sold at Rs. 10 per unit, fetching a profit of 20% on sale. Prepare process accounts and finished goods account.

**SOLUTION:****PROCESS A ACCOUNT**

| Particulars                           | Units        | Rs.          | Particulars                | Units        | Rs.          |
|---------------------------------------|--------------|--------------|----------------------------|--------------|--------------|
| To Input                              | 10000        | 10000        | By Normal Wastage          | 500          | 125          |
| To Sundry Materials                   |              | 1000         | (10000x5%) (500x0.25)      |              |              |
| To Direct labour                      |              | 5000         | By Transfer to Process B   | 9500         | 25325        |
| To Direct expenses                    |              | 1050         | (25325/9120= <b>5.40</b> ) |              |              |
| To Overhead Charges<br>(5000x168/100) |              | 8400         |                            |              |              |
|                                       | <b>10000</b> | <b>25450</b> |                            | <b>10000</b> | <b>25450</b> |

**PROCESS B ACCOUNT**

| Particulars                           | Units       | Rs.          | Particulars                               | Units       | Rs.          |
|---------------------------------------|-------------|--------------|---|-------------|--------------|
| To Transfer from Process A            | 9500        | 25325        | By normal wastage<br>(9500x4%) (380x0.50) | 380         | 190          |
| To Sundry Materials                   |             | 1500         | By Transfer to Process C                  | 9120        | 49263        |
| To Direct labour                      |             | 8000         | (49263/9120= <b>5.40</b> )                |             |              |
| To Direct expenses                    |             | 1188         |   |             |              |
| To Overhead charges<br>(8000x168/100) |             | 13440        |   |             |              |
|                                       | <b>9500</b> | <b>49453</b> |   | <b>9500</b> | <b>49453</b> |

### PROCESS C ACCOUNT

| Particulars                | Units       | Rs.          | Particulars                 | Units       | Rs.          |
|----------------------------|-------------|--------------|-----------------------------|-------------|--------------|
| To Transfer from Process B | 9120        | 49263        | By Normal wastage (9120x5%) | 456         | 456          |
| To Materials               |             | 1480         | By Finished goods           | 8664        | 69312        |
| To Direct labour           |             | 6500         | (69312/8664) = Rs.8         |             |              |
| To Direct expenses         |             | 1605         |                             |             |              |
| To Overhead charges        |             | 10920        |                             |             |              |
|                            | <b>9120</b> | <b>69768</b> |                             | <b>9120</b> | <b>69768</b> |

### FINISHED GOODS ACCOUNT

| Particulars          | Units | Rs.          | Particulars | Units | Rs.          |
|----------------------|-------|--------------|-------------|-------|--------------|
| To process C a/c     | 8664  | 69312        | By sales    | 8664  | 86640        |
| To Profit & loss a/c |       | 17328        | (8664x10)   |       |              |
|                      |       | <b>86640</b> |             |       | <b>86640</b> |

4. The following details are extracted from the costing records of Balaji Oil Mill for the year ended 31<sup>st</sup> March 2010. Purchase of 500 tons of Copra Rs.200000.

|                      | Crushing Rs. | Refining Rs. | Finishing Rs. |
|----------------------|--------------|--------------|---------------|
| Cost of labour       | 2500         | 1000         | 1500          |
| Electric power       | 600          | 360          | 240           |
| Sundry material      | 100          | 2000         | -             |
| Steam                | 600          | 450          | 450           |
| Repairs of machinery | 280          | 330          | 140           |
| Factory expenses     | 1320         | 660          | 220           |

Cost of Casks Rs. 7500

300 tons of crude oil were produced.

250 tons of oil were produced by the refining process.

248 tons of refined oil were finished for delivery.

Copra sacks sold for Rs.400

175 tons of Copra residue sold for Rs. 11000.

Loss in weight in crushing 25 tons. 45 tons of by-products obtained from refining process Rs.6750.

You are required to show the accounts in respect of each of the following stages of manufacturing for the purpose of arriving at the cost per ton of each process and the total per ton of the finished oil: (a) Copra crushing process (b) Refining process (c) Finishing process including casking.



**SOLUTION:****COPRA CRUSHING PROCESS ACCOUNT**

| Particulars             | Units      | Rs.           | Particulars                   | Units      | Rs.           |
|-------------------------|------------|---------------|-------------------------------|------------|---------------|
| To copra used           | 500        | 200000        | By loss in weight in crushing | 25         | -             |
| To labour               |            | 2500          | By sales of cobra sacks       |            | 400           |
| To electric power       |            | 600           | By sale of copra residue      | 175        | 11000         |
| To sundry material      |            | 100           | By refining process           | 300        | 194000        |
| To steam                |            | 600           | (194000/300 = <b>646.67</b> ) |            |               |
| To repairs to machinery |            | 280           |                               |            |               |
| To factory expenses     |            | 1320          |                               |            |               |
|                         | <b>500</b> | <b>205400</b> |                               | <b>500</b> | <b>205400</b> |

**REFINING PROCESS ACCOUNT**

| Particulars                   | Tons       | Rs.           | Particulars                   | Tons       | Rs.           |
|-------------------------------|------------|---------------|-------------------------------|------------|---------------|
| To copra process a/c transfer | 300        | 194000        | By loss in weight             | 5          | -             |
| To labour                     |            | 1000          | By sale of by products        | 45         | 6750          |
| To electric power             |            | 360           | By finishing process A/c      | 250        | 192050        |
| To sundry material            |            | 2000          | (192050/250 = <b>768.20</b> ) |            |               |
| To steam                      |            | 450           |                               |            |               |
| To repairs to machinery       |            | 330           |                               |            |               |
| To factory expenses           |            | 660           |                               |            |               |
|                               | <b>300</b> | <b>198800</b> |                               | <b>300</b> | <b>198800</b> |

**FINISHING PROCESS (INCLUDING CASKING) ACCOUNT**

| Particulars                        | Tons       | Rs.           | Particulars                  | Tons       | Rs.           |
|------------------------------------|------------|---------------|------------------------------|------------|---------------|
| To refining process a/c (transfer) | 250        | 192050        | By loss in weight            | 2          | -             |
| To labour                          |            | 1500          | By finished stock a/c        | 248        | 202100        |
| To electric power                  |            | 240           | (202100/248 = <b>814.9</b> ) |            |               |
| To repairs to machinery            |            | 140           |                              |            |               |
| To steam                           |            | 450           |                              |            |               |
| To factory expenses                |            | 220           |                              |            |               |
| To cost of casks                   |            | 7500          |                              |            |               |
|                                    | <b>250</b> | <b>202100</b> |                              | <b>250</b> | <b>202100</b> |

5. A product Passes through two distinct process “A” and “B” then to finished stock. The Output of A passes direct to “B” passes to Finished Stock. From the following Information, You are required to prepare the process Account

| Particulars                            | Process A | Process B |
|--|-----------|-----------|
| Material Consumed Rs.                  | 12,000    | 6000      |
| Direct Labour Rs.                      | 14,000    | 8000      |
| Manufacturing Exp Rs.                  | 4,000     | 4,000     |
| Input in Process A (units)             | 10,000    | -         |
| Input in Process A (Rs.)               | 10,000    | -         |
| Output (Units)                         | 9400      | 8300      |
| Normal Wastage (% of Input)            | 5%        | 10%       |
| Value of Normal Wastage Per 100 units) | 8         | 10        |

No Opening or Closing Stock is held in Process.

#### Process A

| Particulars              | Units | Rs.   | Particulars   | Units | Rs.   |
|--------------------------|-------|-------|---|-------|-------|
| To Input                 | 10000 | 10000 | By Normal Wastage<br>5%<br>10000 x 5% (8/100<br>x500) | 500   | 40    |
| To Materials<br>Consumed |       | 12000 | By Abnormal<br>Wastage (100 *4.206)                   | 100   | 421   |
| To Direct Labour         |       | 14000 | By Transfer to<br>Process “B”<br>9400*4.206           | 9400  | 39539 |
| To Manufac.Exp           |       | 4000  |   |       |       |
|                          | 10000 | 40000 |   | 10000 | 40000 |

Abnormal Loss = 10000-500-9400

= 100 Units

Cost Per Unit = 40000-40 = 39960 / 9500

Rs.4.20 per unit

Process "B"

| Particulars                  | Units | Rs.   | Particulars                                     | Units | Rs.   |
|------------------------------|-------|-------|---|-------|-------|
| To Transfer from Process "A" | 9400  | 39539 | By Normal Wastage 10% (9400 *10%)<br>10/100*940 | 940   | 94    |
| To Materials Consumed        |       | 6000  |   |       |       |
| To Direct labour             |       | 8000  | By Abnormal Loss                                | 160   | 1086  |
| To Manufactur .Exp           |       | 4000  | By Finished Stock                               | 8300  | 56359 |
|                              | 9400  | 57539 |   | 9400  | 57539 |

Abnormal Loss = 9400 -940-8300

=160 units

Cost per Unit = 57539-94/ 8460

= Rs.6.79

6. Process A is obtained after It Passes through three Distinct processes. Prepare PROCESS Accounts from the following

| Particulars          | Total | Process I | Process II | Process III |
|----------------------|-------|-----------|------------|-------------|
| Materials            | 15084 | 5200      | 3960       | 5924        |
| Wages                | 18000 | 4000      | 6000       | 8000        |
| Production Overheads | 18000 | -         | -          |             |

1000 Units of Materials @ Rs. 6 per unit were Introduced in Process I.

Production Overhead is to be Distributed as 100% on wages.

| Process | Total Output Units | Normal Loss | Value of Scrap Per unit |
|---------|--------------------|-------------|-------------------------|
| I       | 950                | 5%          | 4                       |
| II      | 840                | 10%         | 8                       |
| III     | 750                | 15%         | 10                      |

### Process I

| Particulars                                  | Units | Rs.   | Particulars                          | Units | Rs.   |
|--|-------|-------|--------------------------------------|-------|-------|
| To Input                                     | 1000  | 6000  | By Normal Loss<br>1000 *5%           | 50    | 200   |
| To Materials                                 |       | 5200  |                                      |       |       |
| To wages                                     |       | 4000  | By transfer Process -<br>II (950x20) | 950   | 19000 |
| To production<br>Overhead (100% on<br>Wages) |       | 4000  |                                      |       |       |
|  | 1000  | 19200 |                                      | 1000  | 19200 |

**Cost per Unit =  $19200 - 200 / 950$**

**= Rs. 20**

### Process II

| Particulars                                   | Units | Rs.   | Particulars                             | Units | Rs.   |
|---|-------|-------|---|-------|-------|
| To Transfer From<br>Process -I                | 950   | 19000 | By Normal Loss<br>(950x10%)<br>95 x 8   | 95    | 760   |
| To Materials                                  |       | 3960  | By Abnormal Loss<br>(15 *40)            | 15    | 600   |
| To Wages                                      |       | 6000  | By Transfer To<br>Process III (840 *40) | 840   | 33600 |
| To Production<br>Overheads (100% on<br>wages) |       | 6000  |   |       |       |
|   | 950   | 34960 |   | 950   | 34960 |

**Abnormal Loss =  $950 - 95 - 840$**

**= 15 Units**

**Cost per unit =  $34960 - 760 / 855$**

**= Rs. 40 per Unit**

### Process III

| Particulars                             | Units | Rs.   | Particulars                         | Units | Rs.   |
|---|-------|-------|-------------------------------------|-------|-------|
| To Transfer From Process II             | 840   | 33600 | By Normal loss (840 *15%)<br>126*10 | 126   | 1260  |
| To Materials                            |       | 5924  |                                     |       |       |
| To Wages                                |       | 8000  | By Finished Stock (750*76)          | 750   | 57000 |
| To production Overheads(100 % on wages) |       | 8000  |                                     |       |       |
| To Abnormal Gain (36*76)                | 36    | 2736  |                                     |       |       |
|   | 876   | 58260 |                                     | 876   | 58260 |

**Abnormal Loss/Gain = 840 – 126-750**

**Abnormal Gain = 36 units**

**Cost per Unit = 55524 – 1260**

**= 54264/714**

**= Rs.76**