The Basic of Process Costing

• Process costing is a costing method used where it is not possible to identify separate units of production, or jobs, usually because of the continuous nature of the production process involved.
The Basic of Process Costing

- It is common to identify process costing with continuous production such as the following:
  - Oil refining
  - Paper
  - Food and drinks
  - Chemicals
Features of Process Costing

• The output of one process becomes the input to the next until finished product is made in the final process.

• There will usually be closing WIP which must be valued.

• There is often loss in process due to spoilage, wastage, evaporation and so on
Features of Process Costing

• If the net realisable value of normal losses increases, the actual process costs are reduced by these amounts, meaning the higher the net realisable value of normal losses the lower will be the cost per unit of normal output.
Framework for Dealing with Process Costing

• Process costing is centred around four key steps. The exact work done at each step will depend on whether there are normal losses, scrap, opening and closing WIP.
Framework for Dealing with Process Costing

Step 1
- Determine output and losses

Step 2
- Calculate cost per unit of output, losses & WIP

Step 3
- Calculate total cost of output, losses & WIP

Step 4
- Complete account
Losses in Process Costing

• Losses may occur in process.
• If a certain level of loss is expected, this is known as normal loss.
• If losses are greater than expected, the extra loss is abnormal loss.
• If losses are less than expected, the difference is known as abnormal gain.
Losses in Process Costing

- Normal loss is the loss expected during a process. It is not given cost.
- Abnormal loss is the extra loss resulting when actual loss is greater than normal or expected loss and it is given cost.
Losses in Process Costing

- Abnormal gain is the gain resulting when actual loss is less than the normal or expected loss and it is given a ‘negative cost’.
Losses with Scrap Value

- Scrap is “Discarded material having some value”.
- Loss or spoilage may have scrap value.
- The scrap value of normal loss is usually deducted from the cost of materials.
- The scrap value of abnormal loss (or abnormal gain) is usually set off against its cost, in an abnormal loss (abnormal gain) account.
Valuing Closing WIP

• When units are partly compete at the end of a period (and hence there is closing WIP), it is necessary to calculate the equivalent unit of production in order to determine the cost of a completed unit.
Equivalent Units

- Equivalent units are notional whole units which represent incomplete work, and which are used to apportion cost between WIP and completed output.
Valuing Opening WIP: FIFO Method

- Account can be taken of opening WIP using either the FIFO method or the weighted average cost method.
Valuing Opening WIP: Weighted Average Cost Method

• By this method no distinction is made between units of opening inventory and new units introduced to the process during the accounting period.
Joint Products & By-Products

• **Joint products** are two or more products separated in a process, each of which has a significant value compared to the other.

• A **by-product** is an incidental product from a process which has an insignificant value compared to the main product.
Joint Products & By-Products

- **Joint products** are two or more products which are output from the same processing operation, but which are indistinguishable from each other up to their point of separation.
- A **by-product** is a supplementary or secondary product (arising as the result of a process) whose value is small relative to that of the principal product.
Joint Products & By-Products

• A joint product is regarded as an important saleable item and should be separately costed.
• A by-product is not important as it has no saleable value and it is not separately costed.
• Joint product is a product which is produced simultaneously with other products & is of similar value to at least one of the other product.
Problems in Accounting for Joint Products

• The point at which joint products and by-products become separately identifiable is known as the split-off point or separation point. Costs incurred up to this point are called common costs or joint costs.
Dealing with Common Costs

- The main methods of apportioning joint costs, each of which can produce significantly different results are as follows:
  - Physical measurement
  - Relative sales value apportionment method; sales value at split-off point.
Dealing with Common Costs: Physical Measurement

- With physical measurement, the common cost is apportioned to the joint products on the basis of the proportion that the output of each product bears by weight or volume to the total output.
Dealing with Common Costs: Sales Value at Split-off Point

• The relative sales value method is the most widely used method of apportioning joint costs because (ignoring the effect of further processing costs) it assumes that all products achieve the same profit margin.
Dealing with Common Costs: Sales Value at Split-off Point

• The point of separation, also referred to as the split-off point, is the point in a process where joint products become separately identifiable. Cost incurred prior to this point are common or joint cost.
Accounting for By-products

• The most common method of accounting for by-products is to deduct the net realisable value of the by-product from the cost of the main products.
Accounting for By-products

• A by-product has some commercial value and any income generate from it may be treated as follows:
  • Income from the sale of by-product may be added to sales of the main product.
  • The sales of the by-product may be treated as a separate, incidental source of income.
Accounting for By-products

- The sales income of the by-product may be deducted from the cost of production.
- The net realisable value of the by-product may be deducted from the cost of production of the main product.
Accounting for Abnormal Losses

• The abnormal loss units are valued at their full production cost & credited to the process accounts, so that their occurrence does not affect the cost of good production.

• Abnormal gain recorded in process account is Dr at a cost per unit based on total production cost divided by normal output.
Valuation of Abnormal Losses

• Abnormal loss units are valued at the same cost per unit as completed output. The cost per unit of output and the cost per unit of abnormal loss are based on expected output.

• The basis that is used to credit abnormal losses in process a/c is production cost per unit of normal output.
Define Conversion cost?

- Conversion cost are production cost excluding direct material. OR
- Conversion is the addition of labour and overheads.
Questions & Answers
Thank You

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