

Topic 3

[week 4 and 5]

Difference of Cost Systems by Activity



Learning Outcomes

Upon completion of this topic, the students should be able to:

- Describe the flow of costs in job and process costing system
- Solve the calculation of normal and abnormal losses, accounting for the sale of scrap, and abnormal gain
- Describe the concept of equivalent units and cost elements
- Adopt the methods of apportioning joint costs to joint products, accounting for by-products, scrap, and waste



Process Costing

Can be defined as a form of operation costing used where production follows a series of sequential processes.



Common Features of Process Costing

- **Clearly defined process cost centres and the accumulation of all costs by the cost centres.**
- **The maintenance of accurate records of units and part units produced and the cost incurred by each process.**
- **The averaging of the total costs of each process over the total production of that process, including partly completed units.**
- **The charging of the cost of the output of one process as the raw materials input cost of the following process.**
- **Clearly defined procedures for separating costs where the process produces two or more products, or where by-product arises during production.**

Process Losses

With many forms of production, the quantity, weight, or volume of the process output will be less than the quantity, weight, or volume of the materials input. This may be due to:

- **Evaporation, residuals ash, swarf.**
- **Unavoidable handling, breakage, and spoilage losses.**
- **Withdrawal for testing and inspection.**

Normal Process Losses

Can be defined as the unavoidable losses arising from the nature of the production process and it is therefore logical and equitable that the cost of such losses is included as part of the cost of good production. If any value can be recouped from the sale of imperfect articles or materials then this would be credited to the process account thus reducing overall cost.

Abnormal Process Losses

Can be defined as those losses that are above the level deemed to be the normal loss rate for the process.



Abnormal Process Gains

If unexpected favourable conditions apply in a given period and actual losses may be lower than the calculated normal loss, abnormal gains would be made.

The Concept of Equivalent Units

At the end of any given period, there are likely to be partly completed units. It is clear that some of the costs of the period are attributable to these units as well as those that are fully complete. To be able to spread costs equitably over part finished and fully complete units the concept of equivalent units is required. The number of equivalent units, for cost calculation purposes, is the number of equivalent fully complete units which the partly complete units represent.

Joint Product

Is the term used when two or more products arise simultaneously in the course of processing, each of which has a significant sales value in relation to each other.

By-Product

Is a product which arises incidentally in the production of the main product or products and which has a relatively small sales value compared with the main product or products.

By-Product Costing

- **By-product net realisable value is deducted from the total cost of production.**
- **Total costs are deducted from the total sales value of main and by-product.**
- **By-product receipts are treated as incidental other income and transferred to general profit and loss account.**
- **By-products treated as joint product.**

Apportioning Joint Costs

The commonest method of apportioning joint cost are:

- **The physical unit basis.**
- **The sales value basis.**