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E- CONTENT FOR M.COM (SEMESTER- 2)

SUBJECT: MANAGEMENT ACCOUNTING

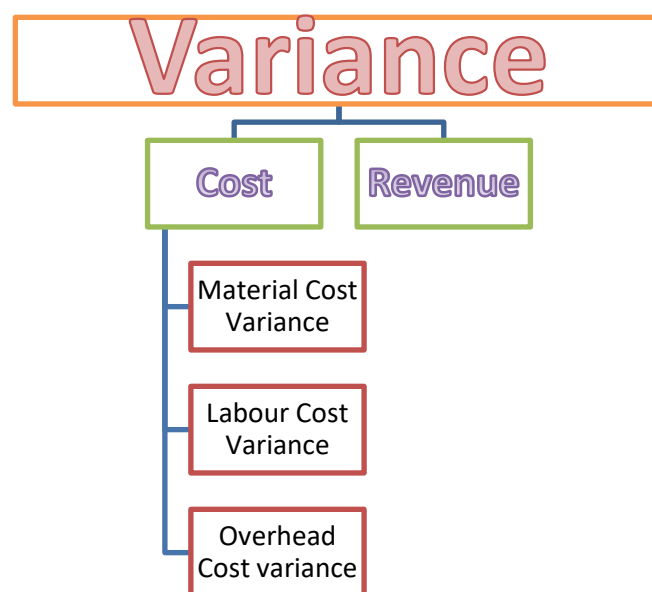
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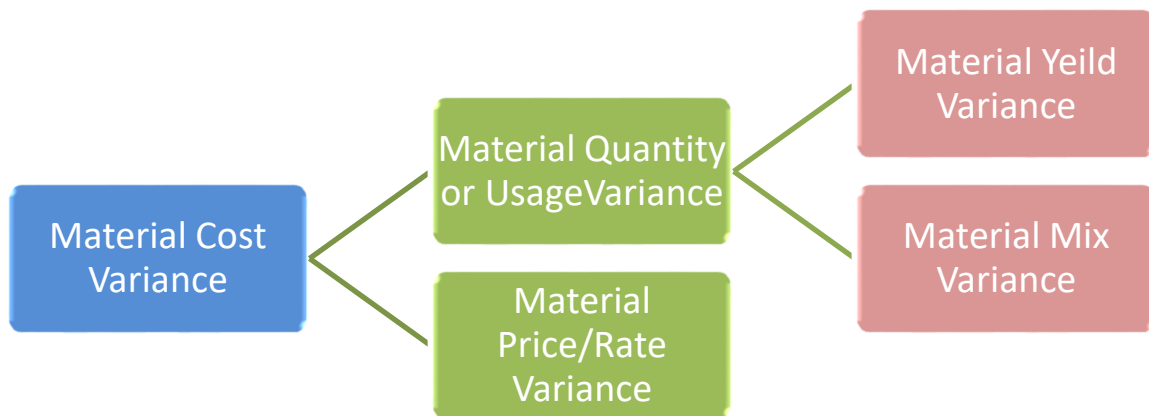
UNIT- III: STANDARD COSTING AND VARIANCE ANALYSIS (Part II)

TOPIC: MATERIAL COST VARIANCE AND ITS COMPONENTS.

NOTE: Refer previous pdf content for theoretical part of this unit.

VARIANCE ANALYSIS





Material Cost Variance

A) Material Cost Variance (MCV)-

It is the difference between the standard cost of materials specified and the actual cost of material used.

Formula:

$$\text{Std. Cost} - \text{Actual Cost}$$

It arises due to variation in the price of the material or in its usage.

a) Material Price Variance (MPV) or Material Rate Variance (MRV)-

This is that portion of the material cost variance which is due to the difference between the standard price specified and the actual price paid.

Formula:

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

It arises due to:

- Change in market price of materials used
- Uneconomic size of purchase
- Failure to obtain rebate or discount or off season price
- Substitute material having a higher or lower unit price.

b) Material Quantity Variance (MQV)/Material Usage Variance (MUV)-

It is that portion of material cost variance which is due to the difference between standard quantity specified and actual quantity used.

Formula:

$$(\text{Std. Quantity} - \text{Actual Quantity}) \times \text{Standard Price}$$

It arises due:

- Lack of due care in the use of materials
- Defective production
- Abnormal wastage through pilferage or other losses in the use of materials.
- Inefficiency in production due to improper method or skill in workers.
- Purchase of inferior materials.
- Use of substitute materials.

We can say,

$$\text{MCV} = \text{MPV} + \text{MQV}$$

i) Material Mix Variance (MMV)-

It is that portion of the material usage variance which is change in the composition of material mix.

It arises due to the difference between the standard and actual composition of mixture of material.

Formula:

$(\text{Revised Quantity} - \text{Actual Quantity}) \times \text{Standard Price}$

ii) **Material Yield Variance (MYV)-**

The difference between actual yield of material in manufacture and the standard yield valued at standard output is called material yield variance.

Formula:

$(\text{Standard Quantity} - \text{Revised Std. Quantity}) \times \text{Std. Price}$

The yield variance may be caused by the defective methods of operation, sub-standard quality of material purchased, lack of due care in handling, lack of proper supervision.

We can say,

MQV = Material Yield Variance + Material Mix Variance

➤ **Favourable Variance-**

It arises only when actual costs are lower than the standard costs for the same level of activity as pre-determined.

Favourable variance is considered as good and indicator of business efficiency.

It can be denoted by 'F'.

➤ **Unfavourable Variance-**

It arises when actual costs are more than pre-determined standard costs. Normally, these variances indicate the inefficiency and hence there is need for a closer and deeper analysis of these variances. It is adverse situation for the concern. It can be denoted by 'A'.
