Varian Analysis

Any study of the deviation between the standard cost and the actual cost is known as

variance analysis.

It is carried out to detect any deviation from standard cost, so that management can take corrective measures to control deviation and minimize cost.

When the actual cost exceeds the standard cost, the difference is referred to as an unfavorable variance or red variance. Such variances are normally recorded in red and if does not exceed, it is termed favorable or black variance.

Variance can be used for control and evaluation only if the standard has been calculated accurately and there is the possibility of measuring performance accurately.

Three main types of variance are:

1. **Direct Material Cost Variance**

It is the difference between the standard cost and the actual cost of the material. It can be calculated as:

Material cost variance = Standard material cost for actual output – Actual material cost

= Standard price X standard quantity – Actual price X Actual quantity

Example 1

Standard price (SP) = Rs. 100 per kg

Standard quantity (SQ) = 100 kg

Actual price (AP) = Rs. 150 per kg

Actual quantity (AQ) = 120 kg

Solution: Material Cost Variance = (SP X SQ) – (AP X AQ)

= (100 X100) – (150 X120) = 10000 – 18000 = Rs. 8000.

1. **Direct Labour Cost Variance**

It is the difference between the standard labor cost for the actual production and the actual labor cost.

It can be calculated as:

Labour cost variance (LCV) = Standard labor cost for actual output – Actual labor costs

= Standard rate/time unit x Standard time for actual output – Actual rate/time unit x Actual

Time.

Example 2

Standard wage rate = Rs. 60/day

Standard time = 6 days

Actual time = 5 days

Actual wage rate = Rs. 100/day

Solution:

Labour cost variance = (SR x ST) – (AR x AT)

(60 x 6) – (5 x 100)

= 360 – 500 = Rs. 140

1. **Direct Overhead Cost Variance**

It is the difference between standard overheads absorbed or received in actual output and the actual overhead cost.

Overhead expenses refer to those expenses associated with running a business that can’t be linked to creating or producing a product or service. Eg: insurance, sales and marketing costs, etc.

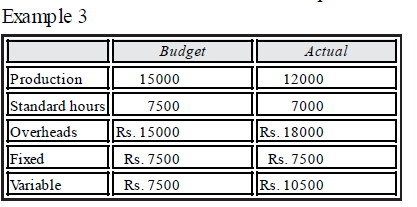
The standard overhead rate can be calculated either by calculating on the basis of time or on the basis of units.

Standard overhead rate per hour = Budgeted overhead/Budgeted hours

Standard overhead rate per unit = Budgeted overhead/Budgeted output

The formula for overhead cost variance (if the unit rate is considered)

= Standard overheads for actual output – Actual overhead



Calculate overhead cost variance

Solution:

Standard unit rate = Rs. 15000/15000 = Re. 1

Standard hour rate = Rs. 15000/7500 = Rs. 2

If calculated by unit rate, Overhead cost variance = Standard overhead cost for actual production – Actual overhead

= 12000 x 1 – 18000 = Rs. 6000

or, if calculated by standard hourly rate

= Standard hours for actual output x Standard hourly rate – Actual overhead

= 2 x 7500 / 15000 x 12000 – 18000

= Rs. 6000.

**Disposition of Variance**

Once the variance analysis has been made, it is for the management to find out the causes for variance and how to dispose of those amounts.

Alternative methods are used for the purpose:

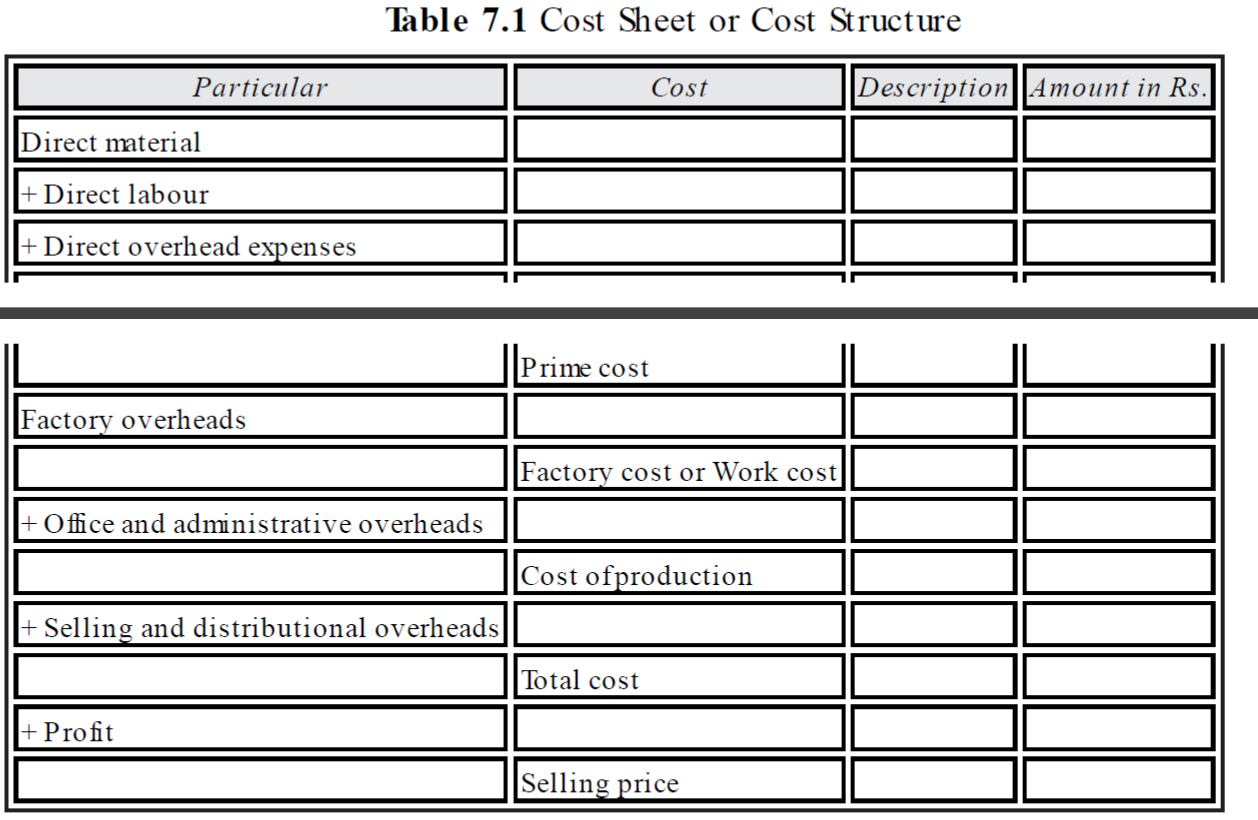
(i) To adjust all or part of the amount as the cost of sales.

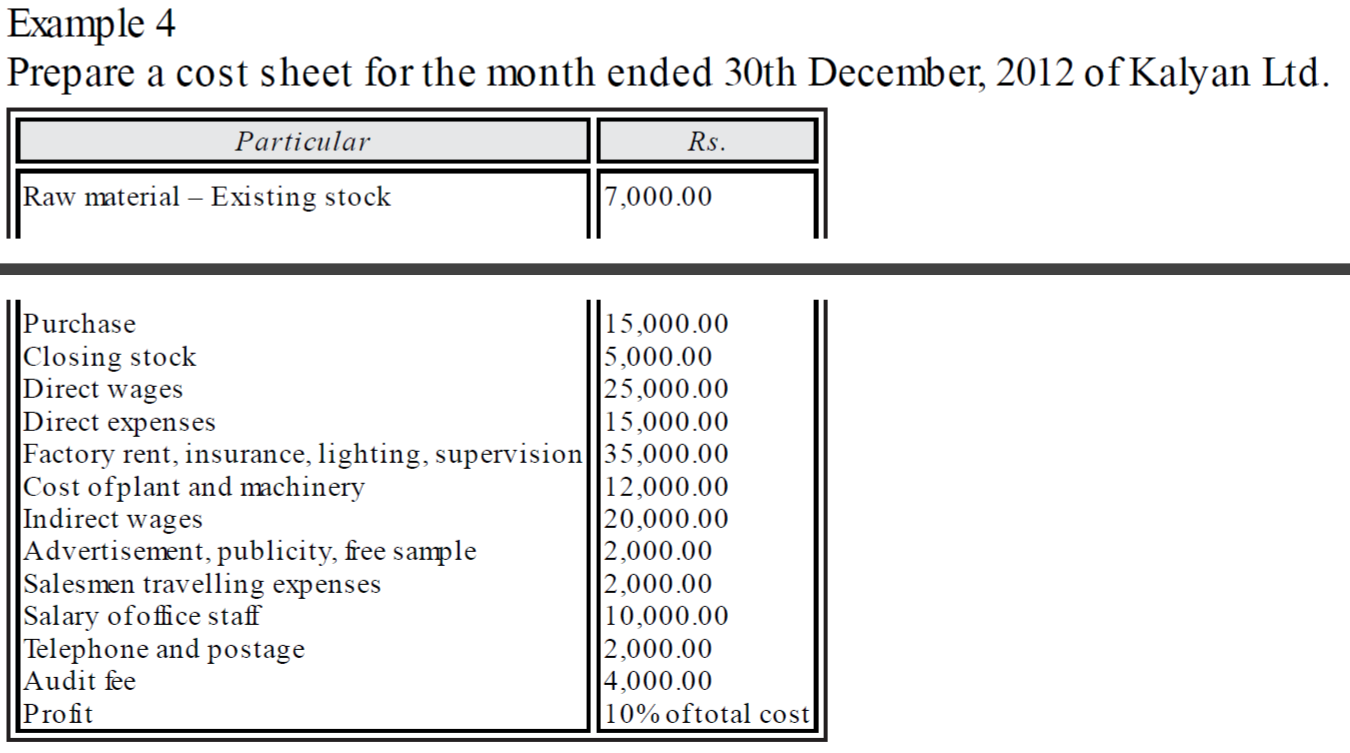
(ii) To transfer all or part of the amount as an exceptional profit or loss.

(iii) To distribute all or part of the amount over inventories of materials, work

in progress, finished goods, and cost of goods sold.

**Preparation of Cost Sheet**

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