

Class: III B.Com (VI Semester)

Subject: Cost Accounting-II

Chapter: Standard Costing (7)

STANDARD COSTING

1. calculate the material cost variance from the following information

Standard quantity specified for actual production 20000units

Actual quantity used 20000units

Actual price per unit 1.10

Standard price per unit 0.90 paise

2. calculate material cost variance of AB co. ltd, from the following information.

Standard kgs of material required for production of

1 unit of output : 4kgs

Standard rate per unit: 2

Actual production : 1000units

Actual kgs of material used: 3800 kgs

Actual price per unit: 2.50

3. calculate the material price variance

Standard 200kgs at 5per kg

Actual 225kgs at 4per kg.

4. calculate material usage variance

When standard material required is 100kgs at 15.50 to produce an article the actual material consumed is 120 kgs at a price of 15.

5. calculate the material mix variance

The standard mix of material

M 180 units at 5 per unit

N 120 units at 4 per unit

The actual mix of material

M 210 units at 7 per unit

N 90 units at 5 per unit

6. the material usage variance is 360 adverse

The standard quantity 300 kgs at 12 per kg

The actual quantity of material purchased 330 kgs at 11.50

Calculate material cost variance

7. calculate the material yield variance

The actual output is 3750 kgs

The standard cost of material is 38000 of standard quantity output is 3800 kgs.

8. calculate the labour cost variance

Actual : 120 hrs at 7 per hour

Standard: 100hrs at 6 per hour

9. calculate the labour efficiency variance

Standard labour rate 24 per hour

Standard hours : 6hours per unit

Actual are:

Units produced 2000

Labour rate 20 per hour

Hours worked 10000hours

10. calculate labour efficiency variance

| Particulars | standard | actual |
|--------------------|----------|--------|
| Labour hours | 5000 | 6000 |
| Wage rate per hour | 4 | 3.50 |

Time lost on account of machinery break down 300 hours.

11. actual output 460 units. Standard output 500 units. Standard rate of wages 9 per hour. A standard time 2 hours per unit. Calculate labour yield variance.

12. a person can complete production activity 100 units by taking 8 hours of time. The standard time fixed for 100 units is 10 hours and rate per hour is 2 calculate labour yield variance.

1. calculate the MCV, MPV, MUV.

Materials for 140kg finished product 200kg. Price of material 1 per kg.

Actual output: 420000 kg

Material used 560000kg

Cost of material 504000

2. the standard quantity and standard price of raw material required for one unit of product A are given below.

| Particulars | std qty | std price |
|-------------|---------|-----------|
| Material X | 2KGS | 3 PER KG |
| Material Y | 4KGS | 2 PER KG |

The actual production and other data are as follows

Output of product A 500 UNITS

| Particulars | total qty for 500 units | total cost |
|-------------|-------------------------|------------|
| Material X | 1200 KGS | 3900 |
| Material Y | 1800 kgs | 4500 |

Calculate MCV, MPV, MUV.

3. calculate the MCV, MPV, MUV.

Quantity of material purchased 3000units

Value of materials purchased 9000

Standard quantity of material required per tonne of finished product 25units

Standard rate of material 2 per unit

Opening stock of material 100 units

Closing stock of material 600units

Finished production during the period 80 tonnes

4. calculate the MPV, MCV, MMV.

| Particulars | standard mix | | | actual mix | | |
|-------------|--------------|------|------|------------|------|------|
| | Qty(kgs) | rate | amt | qty(kgs) | rate | amt |
| A | 225 | 10 | 2250 | 275 | 11 | 3025 |
| B | 275 | 12 | 3300 | 225 | 12 | 2700 |
| | 500 | | 5550 | | | 5725 |

5. calculate the MPV, MUV, MYV.

MATERIALS STANDARD ACTUAL

| | QTY | PRICE | AMT | QTY | PRICE | AMT |
|-----------|----------|-------|-------|----------|-------|-------|
| A | 400 | 11 | 4400 | 500 | 11 | 5500 |
| B | 500 | 15 | 7500 | 400 | 16 | 6400 |
| | 900 | | 11900 | 900 | | 11900 |
| Less:loss | 180(20%) | | | 135(15%) | | |
| | 720 | | 11900 | 765 | | 11900 |

6. calculate LRV, LEV, LCV.

Standard 80 hours at 3 per hour

Actual 100hours at 4 per hour.

7. calculate the LRV,LEV, LCV.

| PARTICULARS | STANDARD | ACTUAL |
|-----------------------|------------|-----------|
| Output | 5000units | 6000units |
| Rate of payment | 3 per unit | - |
| Wages paid with bonus | - | 16000 |

40 hours

| PARTICULARS | DEPT A | DEPT B |
|-------------------------|--------|--------|
| Actual gross wages | 10000 | 9000 |
| Standard hours produced | 8200 | 5800 |
| Standard rate per hour | 1.00 | 1.25 |
| Actual hours worked | 8000 | 6000 |

11. a job is scheduled to be completed in 30 weeks with a labour force of 100 skilled, 40 semi skilled and 60 unskilled operatives. The standard weekly wages of each type of operative are skilled 60, semi skilled 36, and unskilled 24 the work is actually completed in 32 weeks with a labour force of 80 skilled, 50 semi skilled and 70 unskilled operatives and the actual weekly wage rates average 65 for skilled, 40 semi skilled and 20 for unskilled labour. Calculate LRV, LEV, LCV, LMV.

ACTIVITY BASED COSTING.

1. a company manufactures two products furnishes the following data for the year.

| product | Annual output(units) | Total machine hours | Total no. Of purchase orders | Total no. Of set ups |
|---------|----------------------|---------------------|------------------------------|----------------------|
| X | 5000 | 20000 | 160 | 20 |
| Y | 60000 | 120000 | 340 | 40 |

The annual overheads are as under:

Volume related activity costs 700000

Set up related costs 840000

Purchase related costs 625000

You are required to calculate overhead recovery rates under ABC system.

2. the following are the budgeted overheads figures of nasik ltd

BUDGETED OVERHEADS

Material procurement 116000

Material handling 50000

Set up cost 90000

Quality control 36000

COST DRIVERS NO. OF VOLUMES

No. Of orders 1160

No. Of movements 1250

No. Of set ups 900

No. Of inspection 900

Calculate the cost driver rates for production of a batch of X-30 article.

3. the following figures are furnished by ABC ltd

BUDGTED OVERHEADS

Set ups 180000

Quality control 72000

COST DRIVERS

No. Of set ups 900

No. Of inspections 450

The company has produced a batch of 2000 components of Z, its material cost was 26000 and labour cost was 40000. The usage activities of the said batch are as follows:

No. Of set ups 60

No. Of inspections 80

Calculate the total cost of a batch of 2000 components of Z by using the above activities rates for tracing the appropriate amount of overheads.

4. the following is the information furnished by techno tip ltd for the year

| product | Annual output | Machine hours per unit | No. Of purchase orders | No. Of set ups |
|---------|---------------|------------------------|------------------------|----------------|
| A | 3000 | 5 | 200 | 30 |
| B | 7000 | 4 | 300 | 60 |

The costs of activities are as follows

Volume related costs 860000

Purchase related costs 150000

Set up related costs 135000

Calculate overhead recovery rates under activity based costing system..