

Standard Costing

1. Basic Terms

Budget



Kya Socha Tha

Standard



Kya Hona Chahiye Tha

Actual



Kya Ho Gaya



Output Same

Standard Costing

2. Always calculate standard data on the basis of actual output

3. Variances



Standard Costing

4. Material Variance

$$MCV = SC - AC$$

$$MPV = (SP - AP) \times AQ \text{ Purch.}$$

$$MOV = (SQ - AQ \text{ Consume}) \times SP$$

$$MMV = (RSQ - AQ) \times SP$$

$$MYV = (SQ - RSQ) \times SP$$

$$MYV = (AY - SY) \times \text{Std. Cost p.u. of output}$$

Standard Costing

Where,

SC = Standard Cost

AC = Actual Cost

SP = Standard Price

AP = Actual Price

AQ = Actual Quantity

SQ = Standard Quantity

RSQ = Revised Standard Quantity = Actual input in Standard Ratio

AY = Actual Yield

$SY = \text{Standard Yield} = \frac{\text{Standard Output}}{\text{Standard Input}} \times \text{Actual Input}$

$\text{Standard cost Per Unit of Output} = \frac{\text{Total Standard Cost}}{\text{Total Output}}$

Standard Costing

5. Material Cost Variance (MCV)

$$\text{MCV} = \text{Standard cost} - \text{Actual Cost}$$

6. Material Price Variance (MPV)

$$\text{MPV} = (\text{SP} - \text{AP}) \times \text{Actual quantity}$$

7. Material Usage Variance (MUV)

$$\text{MUV} = (\text{SQ} - \text{AQ}) \times \text{SP}$$

8. Material Mix Variance (MMV)

$$\text{MMV} = (\text{RSQ} - \text{AQ}) \times \text{SP}$$

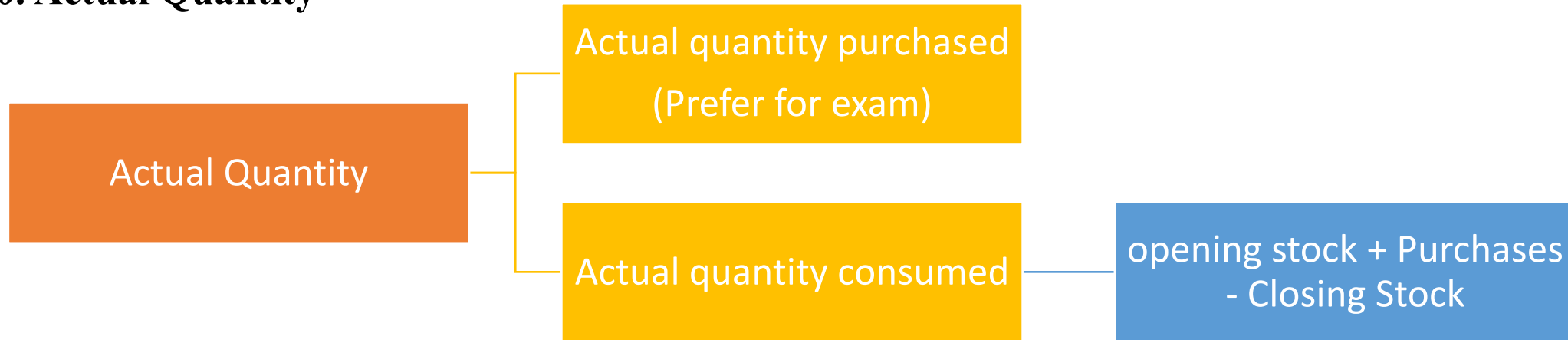
9. Material Yield Variance (MYV)

$$\text{MYV} = (\text{SQ} - \text{RSQ}) \times \text{SP}$$

$$\text{MYV} = (\text{AY} - \text{SY}) \times \text{Standard cost per unit of output}$$

Standard Costing

10. Actual Quantity

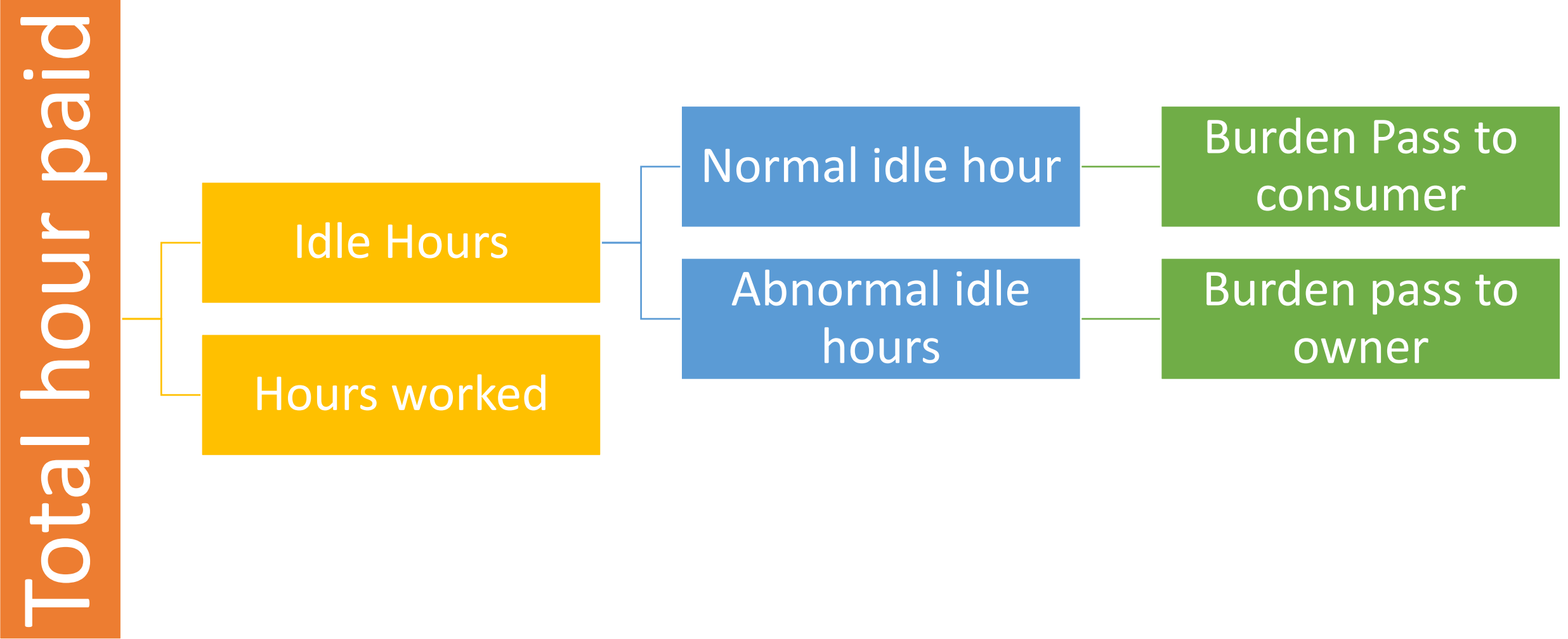


*** If opening stock rate is not given then consider it at standard price**

*** Unless otherwise provided, FIFO method is used**

Standard Costing

11. Total Hours paid



Standard Costing

12. Labour Variances

$$LCV = SC - AC$$

$$LRV = (SR - AR) \times AH_{\text{Paid}}$$

$$\text{Idle time Variance} = \frac{\text{Idle hrs.}}{\text{Hrs.}} \times SR$$

- ⊗ Always Adverse
- ⊗ Abnormal loss

$$LEV = (SR - AH_{\text{work}}) \times SR$$

$$LMV = (RSH - AH) \times SR$$

$$LYV = (SH - RSH) \times SR$$

⊗ SR

$$LYV = (AY - SY) \times \text{Std. Cost P.u. of Output}$$

⊗ RSH will be on AH worked

Standard Costing

13. Labour Cost Variance (LCV)

$LCV = \text{Standard cost} - \text{Actual cost}$

14. Labour Rate Variance (LRV)

$LRV = (SR - AR) \times \text{Actual hours paid}$

15. Labour Efficiency Variance (LEV)

$LEV = (SH - \text{Actual hours worked}) \times SR$

16. Labour Idle Time Variance

$\text{Idle time variance} = \text{Idle hours} \times SR$

(Always Adverse & represent Abnormal loss)

17. Labour Mix Variance (LMV)

$LMV = (RSH - AH \text{ worked}) \times SR$

18. Labour Yield Variance (LYV)

$LYV = (SH - RSH) \times SR$

$LYV = (AY - SY) \times \text{Standard cost per unit of output}$

Standard Costing

19. Variable OHs Variance

$$\text{V. OH Cost Var.} = \text{Recovered OHs} - \text{Actual OHs}$$

$$\begin{aligned} &\downarrow \\ \text{V. OH Expd. Var.} \\ &= (RR - AR) \times \text{AH worked} \end{aligned}$$

$$\begin{aligned} &\downarrow \\ \text{V. OH Efficiency Var.} \\ &= (SH - AH \text{ work}) \times RR \end{aligned}$$

⊛ Var. OHs are always on Hours worked

Standard Costing

20. Variable OH Cost Variance (VOCV)

$$\text{VOCV} = \text{Recovered OHs} - \text{Actual OHs}$$

21. Variable OH Expenditure Variance (VOEV)

$$\text{VOEV} = (\text{Recover Rate} - \text{Actual Rate}) \times \text{Actual hours worked}$$

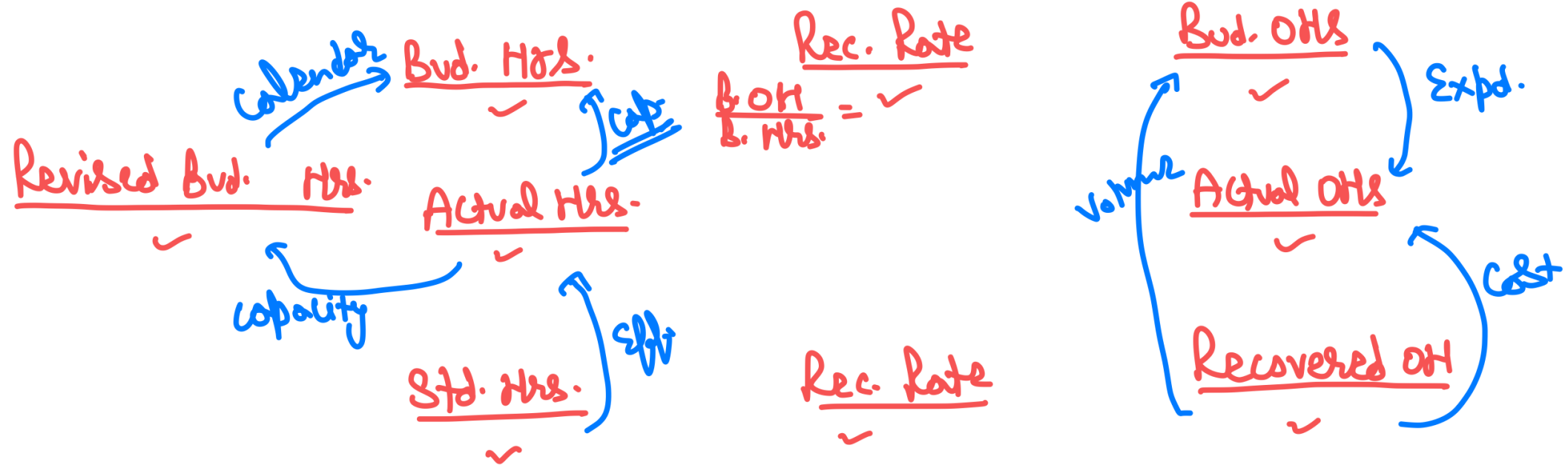
22. Variable OH Efficiency Variance (VOEFV)

$$\text{VOEFV} = (\text{SH} - \text{Actual hours worked}) \times \text{Recovery Rate}$$

Standard Costing

23. Fixed OHs Variance

- This is based on hours paid
- Fixed OHs are estimated in advance
- Based on estimated OHs, recovery rate is computed
- Based on Recovery rate, OHs are recovered
- Actual OHs are paid



Standard Costing

- 24. Fixed OH Cost Variance (FOCV)**
FOCV = Recovered OHs – Actual OHs
- 25. Fixed OH Expenditure Variance (FOEV)**
FOEV = Budgeted OHs – Actual OHs
- 26. Fixed OH Volume Variance (FOVV)**
FOVV = Recovered OHs – Budgeted OHs
- 27. Fixed OH Efficiency Variance (FOEFV)**
FOEFV = (Standard hours – Actual Hours) × Recovery Rate
- 28. Fixed OH Capacity Variance (FOCPV)**
FOCPV = (Actual Hours – Revised budgeted hours) × Recovery Rate
- 29. Fixed OH Calendar Variance (FOCLV)**
FOCLV = (Revised budgeted hours – Budgeted hours) × Recovery Rate

Standard Costing

30. Budget Ratios or Control Ratios

$$\text{Efficiency Ratio} = \frac{\text{Standard hours}}{\text{Actual hours}} \times 100$$

$$\text{Activity Ratio} = \frac{\text{Standard hours}}{\text{Budgeted hours}} \times 100$$

$$\text{Calendar Ratio} = \frac{\text{Actual working days}}{\text{Budgeted Working Days}} \times 100 = \frac{\text{Revised budgeted hours}}{\text{Budgeted hours}} \times 100$$

$$\text{Actual usage of Budgeted Capacity Ratio} = \frac{\text{Actual hours}}{\text{Budgeted hours}} \times 100$$

$$\text{Activity Ratio} = \text{Actual usage of Budgeted Capacity Ratio} = \text{Efficiency Ratio} \times \text{Capacity Ratio}$$

$$\text{Standard Capacity Ratio} = \frac{\text{Budgeted hours}}{\text{Maximum possible hours in budget}} \times 100$$

$$\text{Actual Capacity Usage Ratio} = \frac{\text{Actual hours}}{\text{Maximum possible working hours}} \times 100$$