

Cost Variance

$$\text{Cost Var} = SQ \times SR - AQ \times AR$$

$$\text{Rate Variance} \\ (SR - AR)$$

$$\text{usage variance [Mat-} \\ \text{consumed]} \\ = SR(SQ - AQ)$$

$$\text{Material Variance} \\ (SM^* - AM)$$

Qty consumed distribute
d mixing proportion

$$\text{Sub-usage variance /} \\ \text{Yield Variance}$$

$$= SR(SQ - SM)$$

OR

$$= SCV(SY - AY)$$

Direct Lab. Cost Variance

$$\text{Total Cost Var} = SH \times SR - AH \times AR$$

$$\text{Rate Variance} \\ = AH(SR - AR)$$

$$\text{efficiency variance} \\ = SR(SH - AH)$$

Consider
Hrs paid

$$\text{Idle time var.}$$

$$= SR \times \text{Idle time} \\ (\text{Hrs paid} - \text{Hrs} \\ \text{Worked})$$

$$\text{Mix / Gang Var.}$$

$$= SR(SM^* - AM)$$

* Total actual time
Worked for distribute
in std mix proportion

$$\text{Sub-eff. var /}$$

$$\text{Yield Var.}$$

$$= SR(SH - SM)$$

OR

$$= SCV(SY - AY)$$

Hrs
Worked

Overhead Variance

$$\text{Rate O/H Variance} \\ = SRR/\text{unit} \times \text{Act O/P} - \text{Act O/H} \\ \text{OR} \\ = SRR/\text{hr} \times SH - A \text{ oh}$$

$$\text{Efficiency Var.}$$

$$= SRR/\text{hr} \times A \text{ O/P} - A \text{ O/H}$$

$$\text{Efficiency Var.}$$

$$= SRR/\text{hr} (SH - AH)$$

OR

$$= SRR/\text{unit} (S \text{ O/P} - A \text{ O/P})$$

Capacity Variance

$$= SRR/\text{day} (B \text{ days} - A \text{ days})$$

Capacity Var.

$$= SRR/\text{hr} (B \text{ hrs}^* - A \text{ hrs})$$

* For actual days

Efficiency Variance

$$= SRR/\text{hr} (SH - AH)$$

Overhead Cost Variance

Fixed Overhead Variance

$$= SRR/\text{unit} \times A \text{ O/P} - A \text{ O/H}$$

$$\text{Expenditure Var.}$$

$$= \text{Budget oh} - \text{Actual oh}$$

$$\text{Volume Variance}$$

$$= SRR/\text{unit} (B \text{ Qty} - A \text{ Qty})$$

Misc. Variance

$$= SRR/\text{unit} \left(\frac{\text{output}}{\text{act. eff.}} - \frac{\text{std. output}}{\text{std. eff.}} \right)$$

OR

$$= SRR/\text{unit} \left(\text{std. O/P for act hrs} - \frac{\text{actual O/P}}{\text{eff.}} \right)$$