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Idle time variance
 = Abnormal idle time x Std. rate
 = 20 x 6 = 120 (unfavourable)
 = LRV + LEV + ITV
 = ₹ 280 (unf) + ₹ 240 (fav) + ₹ 120 (unf)
 = ₹ 160 (unf)
 LCV

Labour efficiency variance can be analysed into two - labour mix variance (LMV) and labour yield variance (LYV).
 Labour Mix Variance (LMV)
 When different types or grades of labour are used in the production process, two mixes variance are computed. One is labour mix variance and the other is labour yield variance.

Labour mix variance is a part of labour efficiency variance. It arises when there is a change in the composition of labour force. It is calculated as follows:-
 (1) Where there is no change in the standard composition of labour and total time spent is equal to the standard time
 $LMV = Std. cost of std. composition - Std. cost of actual composition$

(2) When there is change in the labour composition due to shortage of one grade of labour, but there is no change in the total standard time and total actual time.
 Labour mix variance (LMV) = Std. cost of revised std. composition - std. cost of actual composition

(3) When total actual time of labour differs from total standard time of labour.
 $LMV = \left[\frac{\text{Total time of actual composition}}{\text{Total time of std. composition}} \times \text{Std. cost of Std. composition} \right] - \text{Actual cost of Actual composition}$
 or = Std. rate x [Revised std. time - Actual time]
 where, Revised std. time = Std. time x $\frac{\text{Total time of actual workers}}{\text{Total time of std. workers}}$

Example 8
 From the following, calculate labour mix variance:
 Standard wages:
 Grade A: 40 workers at ₹ 3 per hour for 80 hours
 Grade B: 60 workers at ₹ 5 per hour for 80 hours
 Actual wages:
 Grade A: 50 workers at ₹ 3.20 per hour for 80 hours
 Grade B: 50 workers at ₹ 4.60 per hour for 80 hours
Solution
 Labour mix variance = Std. cost of std. mix - Std. cost of actual mix or composition.

Standard Costing

Standard cost of std. mix:

Grade A : 40 workers @ ₹ 3 per hour for 80 hours = 9,600
 Grade B : 60 workers @ ₹ 5 per hour for 80 hours = 24,000
33,600

Std. cost of actual mix:

Grade A : 50 workers @ ₹ 3 per hour for 80 hours = 12,000
 Grade B : 50 workers @ ₹ 5 for 80 hours = 20,000
32,000

Labour mix variance (LMV) = 33,600 - 32,000 = ₹ 1,600 (fav.)

Example 9

Calculate labour mix variance:

Standard wages: Grade A: 120 workers @ ₹ 10 per hour
 Grade B: 180 workers @ ₹ 15 per hour
 Actual wages: Grade A: 140 workers @ ₹ 11 per hour
 Grade B: 160 workers @ ₹ 13 per hour
 Budgeted hours 800, Actual hours 850

Solution

Standard hours A: 120 x 800 = 96,000
 B: 180 x 800 = 1,44,000
2,40,000
 Actual hours A: 140 x 850 = 1,19,000
 B: 160 x 850 = 1,36,000
2,55,000

$$LMV = \left[\frac{\text{Total time of actual composition}}{\text{Total time of std. composition}} \times \text{Std. cost of Std. composition} \right] - \text{Actual cost of Actual composition}$$

Std. cost of std. composition = Std. time x Std. rate per hour

A: 96,000 x 10 = 9,60,000
 B: 1,44,000 x 15 = 21,60,000
31,20,000

Std. cost of actual composition = Actual time x Std. rate per hour