

Halsey Premium Plan

- It is known as Fifty Fifty Plan
- Standard time is fixed for the performance of each job;
- Worker is paid for actual time taken at an hourly rate plus **50%** of time saved as bonus

$$\text{Total Earnings} = T \times R + \frac{50}{100} (S - T) R$$

Where:

T = Time taken or Actual time

R = Rate per hour or Rate of wages

S = Standard time or Time allowed

Halsey – Weir Premium Plan

- Worker is paid for actual time taken at an hourly rate plus **30%** of time saved as bonus

Rowan System or Rowan Plan

- It was introduced in 1901 by David Rowan - England

$$\text{Total Earnings} = T \times R + \frac{S-T}{S} \times T \times R$$

Where:

T = Time taken or Actual time or Hours Worked

R = Rate per hour or Rate of wages

S = Standard time or Time allowed

Ill 15. A worker is paid at 25 paise per hour for completing a work within 8 hours. If he completes the work within 6 hours, calculate his wages under Halsey Plan when the rate of premium is 50%. Also ascertain the **effective hourly rate** of earnings by the worker.

$$\text{Total Earnings} = \text{Hours Worked (T)} \times \text{Rate per hour (R)} + \frac{50}{100} (\text{Time saved} \times \text{Rate per hour})$$

$$\text{Time saved} = \text{Standard Time} - \text{Actual Time}$$

$$\begin{aligned} \text{Total Earnings} &= 6 \times 0.25 + \frac{50}{100} (8 - 6)0.25 \\ &= 1.5 + 0.25 = \text{Rs. 1.75} \end{aligned}$$

$$\text{Effective Hourly Rate} = \frac{\text{Total Earnings}}{\text{Actual Time}} = \frac{1.75}{6} = \text{Rs.0.292 per hour}$$

Ill 16. Calculate the total earnings from the following data under Halsey Plan and under Halsey-Weir plan

Standard Time 10 hrs

Time taken 8 hrs

Time rate Rs.2.50 per hour

$$\text{HP} = T \times R + \frac{50}{100} (S - T) R$$

$$\text{Total Earnings} = 8 \times 2.5 + \frac{50}{100} (10 - 8) 2.5$$

$$= 20 + 2.5$$

$$= \text{Rs. } 22.5$$

$$\text{HWP} = T \times R + \frac{30}{100} (S - T) R$$

$$\text{Total Earnings} = 8 \times 2.5 + \frac{30}{100} (10 - 8) 2.5$$

$$= 20 + 1.5$$

$$= \text{Rs. } 21.5$$

$$\text{Effective Hourly Rate} = \frac{\text{Total Earnings}}{\text{Actual Time}}$$

Rowan System or Rowan Plan

Where:

T = Time taken or Actual time or Hours Worked

R = Rate per hour or Rate of wages

S = Standard time or Time allowed

$$\begin{aligned}\text{Total Earnings} &= T \times R + \frac{S-T}{S} \times T \times R \\ &= 8 \times 2.5 + \frac{(10-8)}{10} \times 8 \times 2.5 \\ &= 20 + \frac{2}{10} \times 20 \\ &= \text{Rs. 24}\end{aligned}$$

$$\text{Effective Hourly Rate} = \frac{\text{Total Earnings}}{\text{Actual Time}}$$