

$$P = (I * 100) / [(R1 * T1) + (R2 * T2) + (R3 * (T3 - T2 - T1))]$$

Ex : On a sum of money the rate of interest is 5% Per Annum for the first 3 years, 6% Per Annum for the next 4 years, and 8% Per Annum for the next years beyond the first 7 Years. If the interest obtained in 12 Years is Rs. 3,950, Find the Sum?

Sol:  $5\% \times 3 + 6\% \times 4 + 8\% \times 5 = 15\% + 24\% + 40\% = 79\%$

$$\Rightarrow (79/100) P = 3950$$

$$P = (39500/79) = 5000$$

**Trick-3: If sum becomes S1 in T years and S2 in T+1 years, then, Rate of interest is**

$$R = [(S2 - S1) * 100] / [S1 - (S2 - S1) * T]$$

Here,  $I = S2 - S1$ ,  $P = S1 - (S2 - S1)$

Ex: if sum becomes 1200 in 2 years and 1400 in 3 years, so, the Rate of interest is ?

a. 10 b. 5 c. 12 d. 12.5

Sol:  $R = [(1400 - 1200) * 100] / (1000 * 2)$

$$R = 10\%$$

**Trick-4: If R1 is fallen to R2, then, income diminished by D, then, principal becomes**

$$= (D * 100) / (R1 - R2)$$

Ex : if Rate of interest fallen from 7% to 5%. Due to fall of R, income diminished by 50, the principal is ?

a. 2500 b. 5000 c. 1000 d. 4000

Sol:  $= (50 * 100) / (7 - 5) = 2500$

**Trick-5: If sum becomes S1 in T1 years and S2 in T2 years, then, Rate of interest is**

$$= [(S2 - S1) * 100] / [(T2 - T1) * S1 - T1 * (S2 - S1)] * T1]$$

**Trick-6: P is given in two parts and interest is same. part-I is given for R1 for T1 years, part-II is given for R2 for T2 years, the**

part-I amount is

$$= (P * T2 * R2) / [(T1 * R1) + (T2 * R2)]$$

Ex: 10000 is given in two parts and interest is same. part-I is given for 2% Rate of interest for 7 years and part-II is given for 7% Rate of interest for 3 years, then, part-I principal is ?