

Partnership

Ratio of investment \times Time = Ratio of Profit

$$A's \text{ investment} \times A's \text{ Time} : B's \text{ Investment} \times B's \text{ Time} = A's \text{ Profit} : B's \text{ Profit}$$

- 1.) P and Q jointly buy a hotel. P invest 6 time investment of Q. on receiving profit RS 84000 what will be P's share in it

$$P = 6Q$$

$$\frac{P}{Q} = \frac{6}{1} \quad G+1$$

$$P's \text{ share} = \frac{6}{7} \times 84000 = 72000 \text{ Rs}$$

$$Q's \text{ share} = 84000 - 72000 = 12000 \text{ Rs}$$

- 2.) Rohit starts a travel agency by investing RS 40,000. After 4 months Ray joins the agency. Ray invests RS 50000 what will be the profit share if they earn RS 187,000 as profit in entire year

$$40,000 \times 12 : 5000 \times 4 = P_R : R_R$$

$$480000 : 200000$$

$$6 : 5$$

$$\text{Pay} = \frac{5}{11} \times 187000$$

$$\text{Pay} = 85000$$

3) M invests Rs 4000 in coaching classes. After 3 months N comes along with Rs 8000. P comes with Rs 20,000. The classes end with a profit of Rs 112000 at end of each year. If profits of M, N & P are in ratio 6:9:5 how many months P was involved

$$\begin{array}{ccc} \text{M} & \text{N} & \text{P} \\ 4000 \times 12 & 8000 \times 4 & 2000 \times K = 6:9:5 \end{array}$$

$$48000 \quad 71000 \quad 20000K = 6K:9K:5K$$

$$48000 = 6K$$

$$K = 8000$$

$$20000K = 5(8000)$$

$$7 = 2 \text{ months}$$

4) Ratio of profits of P, Q, R are 5:8:9 respectively. What is their invested ratio if time period is 2:5:8 respectively

$$\begin{array}{ccc} \text{P} & \text{Q} & \text{R} \\ I \times T = P & & \\ I = \frac{P}{T} & \begin{array}{ccc} 5 & 8 & 9 \\ 2 & 5 & 8 \end{array} & \end{array}$$

$$\text{LCM} = 40$$

$$\begin{array}{ccc} \text{P} & \text{Q} & \text{R} \\ 5/2 & 8/5 & 9/8 \end{array}$$

$$\begin{array}{ccc} 40 \times \frac{5}{2} & 40 \times \frac{8}{5} & 40 \times \frac{9}{8} \end{array}$$

$$\text{LCM} = 64:40:45$$

- 5) Ajay & Vijay investment is in ratio 5:2
 Ajay gets 3420 ₹ as profit after donating
 15% of total to orphanage. What is Vijay's
 share

$$A:V = 5:2$$

$$A = \frac{5}{7} \times \text{Total Profit}$$

$$3420 = \frac{5}{7} \times P \quad \text{TP} = 6840 \text{ ₹}$$

$$V = \frac{2}{7} \times 6840 \text{ ₹} \quad V = 1968 \text{ ₹}$$

- 6) P, Q and R start a hotel. Q and R
 invest equally but P invest one-fifth
 of total investment amount. on getting
 a profit of 225000, how much would be
 difference between P and R

$$P = \frac{1}{5} (225000) = 45000 \text{ ₹}$$

$$Q = R$$

$$225000 - 45000$$

$$\frac{180000}{2} = 90000$$

diff

$$90000 - 45000 = 45000 \text{ ₹}$$

- 7.) P and Q start a cafe with a capital Rs 20000 and Rs 40000 respectively. after a year out of profit Rs 15000, P get his share of profit plus some money as his salary. In total if P gets Rs 7000, what is the salary amount he received

Interp

$$20000 : 40000 = P : Q = 1 : 2$$

$$P = \frac{1}{3} \times (15000 - 5000)$$

$$7000 = 5000 + \text{Salary}$$

$$\text{Salary} = 2000$$

- 8.) Rs 15000 were invested by Ram & Shyam together to start a small business. They got profit of Rs 2000 at the end of year. Shyam took his profit share of Rs 600 how much did Ram win

$$R : S = 15000 : 15000 = 1 : 1$$

$$R : S = 1400 : 600$$

$$R = \frac{14}{20} \times 2000$$

$$R = 1400$$