

# PARTNERSHIP

202

- Q8 A & B are two partners start a business by investing a capital 25,000 Rs and 35,000 Rs. and decide to share their profit acc. to their capital. But C joins the business on a condition that they will distribute the profit equally (1:1:1) and for that C gives 2,20,000 to A & B. find in what ratio A & B will distribute that amount.

$$\begin{array}{ccc}
 A & : & B \\
 5 & : & 7 \\
 \frac{5}{4} & : & \frac{7}{4} \\
 \hline
 \text{A का शेयर} & : & \text{B का शेयर} \\
 1 & : & 3 \\
 \hline
 \end{array}$$

8 का लाभ  
कि 4 गया C के पास

220,000

(A) 55,000      (B) 1,65,000

$$\begin{array}{r}
 25000 : 35000 \\
 5 : 7 \\
 \text{profit} = \frac{12}{5+7} \\
 \text{A} \quad \text{B} \\
 4 \quad 4 \quad 4
 \end{array}$$



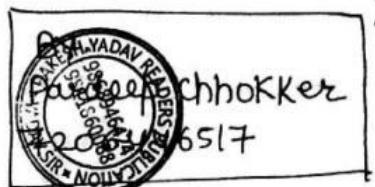
- Q9 A & B start a partnership with Rs 1500 and Rs 2000. After 4 months C also joins the business with Rs 2250. If B withdraw his capital after 9 months then find the share of profit of B in a total profit of Rs 900.

A	B	C	
$1500 \times 12$	$2000 \times 9$	$2250 \times 8$	
1800	1800	1800	
1 : 1 : 1			

$$\begin{aligned}
 3 &\rightarrow 900 \\
 1 &\rightarrow 300 \\
 B &\rightarrow 300
 \end{aligned}$$

- Q10 A & B start a business with Rs 50 and Rs 45. After 4 months A withdraw half of his capital and B withdrew half capital after 6 months and C joins the business with a capital of Rs 70 after 6 months. find the profit sharing ratio.

$$\begin{array}{ccc}
 A & B & C \\
 50 \times 4 & 45 \times 6 & 70 \times 6 \\
 25 \times 8 & 22.50 \times 6 & \\
 \hline
 400 & 405 & 420 \\
 80 : & 81 : & 84
 \end{array}$$



203

- (101) A & B start a business with Rs 15000 and 15000. After 3 months A withdraw Rs 5000 and B invest Rs 5000 more. C joined the business with Rs 21000 next after 3 months. If the total profit is 24900, find the share of C.



$$\begin{array}{ccc}
 A & B & C \\
 16000 \times 3 & 15000 \times 3 & 21000 \times 6 \\
 11000 \times 9 & 20000 \times 9 & \\
 \hline
 147 : & 225 : & 126
 \end{array}
 \quad \begin{array}{l}
 498 - 24900 \\
 1 - 50 \\
 C = 126 \times 50 = 6300 \text{ Rs.}
 \end{array}$$

- (102) A invest  $\frac{1}{6}$  part of total capital for  $\frac{1}{6}$  time. B invest  $\frac{1}{3}$  part of total capital for  $\frac{1}{3}$  time and C invest the rest capital for full time. If the total profit is Rs 23000, find the share of B.

$$\begin{array}{cccc|c}
 \text{Total capital} = 6 & A & B & C & \\
 1 \times 2 & 2 \times 4 & 3 \times 12 & & 23 \rightarrow 23,000 \\
 \frac{1}{6} & \frac{1}{3} & 36 & & 1 \rightarrow 1000 \\
 \frac{2}{6} = 2 & 1 : & 4 : & 18 & B = 4000
 \end{array}$$

- (103) A & B start a business, A invest  $\frac{1}{4}$  capital for  $\frac{1}{4}$  th time and B invest  $\frac{1}{5}$  th capital for  $\frac{1}{2}$  time and C invest the remaining capital for full time. How should they divide a profit of Rs 1140.

$$\begin{array}{cccc|c}
 A & B & C & & \begin{array}{l}
 \frac{1}{4} \quad \frac{1}{5} \\
 \text{Capital} = \text{LCM of } 4, 5 \\
 = 20
 \end{array} \\
 5x_1 & 4x_2 & 11x + 2_4 & 57 \rightarrow 1140 & \\
 5 : & 8 : & 44 & 1 \rightarrow 20 & \\
 & & & A \rightarrow 100 & \\
 & & & B \rightarrow 160 & \\
 & & & C \rightarrow 880 & \text{Ans}
 \end{array}$$

(104) A, B, C start a business by investing the capital in 5:6:8. At the end of the business they receive the profit in the ratio of 5:3:12. find the ratio of time for w/c they contribute their capital ?

	A	:	B	C	
P	5		3	12	
C	5		6	8	
T	$\frac{1}{5} \times 2$		$\frac{1}{3} \times 2$	$\frac{3}{8} \times 2$	
	2	:	1	: 3	<u>Ans.</u>

$$P = C \times T$$

$$T = \frac{P}{C}$$

$$C = \frac{P}{T}$$

(105) A, B, C start a business, A invest money for 4 months & claim  $\frac{1}{8}$  of the total profit & B invest money for 6 months & claim  $\frac{1}{3}$  of the profit while C invest rs 1560 for 8 months. How much money A & B invest ?

P	A	B	C		$\frac{1}{8}$	$\frac{1}{3}$
T	4	6	8		$39 \rightarrow 1560$	
C	$\frac{3}{4} \times 24$	$\frac{4}{3} \times 24$	$\frac{13}{8} \times 24$		$1 \rightarrow 40$	
	18	32	39		$A \rightarrow 18 \times 40 = 720$	
					$B \rightarrow 32 \times 40 = 1280$	

$$P = 24 \text{ (L.M.) (of 8,3)}$$

(106) A & B rent a pasture for 10 months. A puts in 100 cows for 8 months. How many cows can B put in for the remaining two months if he pays  $\frac{3}{2}$  as much as A.

$$A = 100 \times 8$$

$$B = \frac{C \times 2}{3}$$

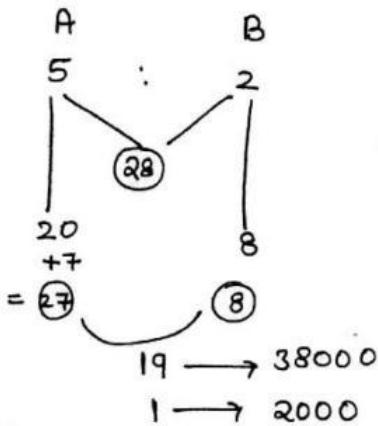
$$^{25} 100 \times 8 \times 3 = C \times 2 \times 2$$

$$C = 600$$

$$B = A \times \frac{3}{2}$$

$$\frac{B}{A} = \frac{3}{2}$$

- (107) A & B start a business with 50,000 & 20,000 Rs. If A 20% is working partner and takes 20% of the total profit as his salary and remaining profit is divided acc. to their capital. If in this process A received Rs 38000 more than B. Find the amount of total profit?



$$20\% = \frac{1}{5}$$

$$T.P = 5 \times 7$$

$$A's \text{ salary} = \frac{1}{7} \times T.P$$

$$\text{Profit to be distributed} = 4 \times 7 \rightarrow \text{Multiply by 7 so that fraction is } \frac{1}{7}$$

$$\text{Total Profit} = 35 = 35 \times 2000$$

$$= 70000 \text{ Rs } \underline{\text{Ans}}$$

- (108) A, B, C are three partners with a capital 8,00,000, 12,00,000, 15,00,000 and they decide to share their profit acc to the ratio of their capital. But A is working partner and takes 12½% of total profit as salary. If A receives Rs 5200 from the business. find the amount of total profit?

A	B	C
8 : 12 : 15		
$\frac{8}{35} \times 35$	$\frac{12}{35} \times 35$	$\frac{15}{35} \times 35$
8 : 12 : 15		
+5		
13		



$$12\frac{1}{2}\% = \frac{15}{8} \times \frac{1}{5} \rightarrow \text{A's salary}$$

$$\text{Distributed P} = 7 \times 5$$

$$13 \rightarrow 5200$$

$$1 \rightarrow 400$$

$$\text{Total Profit} = 40 \times 400 = 16000 \text{ Rs}$$

- (109) A & B are two partners with capital 50,000 & 70,000 and agreed that 70% of the total profit should be divided equally b/w them and the remaining profit in the ratio of their capital. if one partner gets Rs 90 more than other find the total profit?

(115) A & B started a business with a capital of Rs 32,000 & Rs 56,000 & decide to share their profit acc. to their capital. But C joins the business on a condition that they will ~~divide~~<sup>share</sup> the profit equally & for that C gives 2,20,000 to A & B. Then find in what ratio A & B will distribute that amount.

$$\begin{array}{ccc}
 A : B & C & \frac{32000}{4} : \frac{56000}{7} \\
 4 : 7 & & P = 11 \\
 \hline
 \frac{11}{3} & \frac{11}{3} & \frac{11}{3} \\
 \hline
 \frac{1}{3} & \frac{10}{3} & \\
 & & \text{After C joins} = \frac{1}{3} = P \\
 1 : 10 & & \textcircled{A} \quad \textcircled{B} \quad \frac{11}{3} \quad \frac{11}{3} \quad \frac{11}{3} \\
 & & 4 - \frac{11}{3} \quad 7 - \frac{11}{3} \\
 & & = \frac{1}{3} \quad \frac{10}{3} \\
 & & \downarrow \quad \downarrow \\
 & & \text{less of A} \quad \text{less of B} \\
 & & \text{2,20,000} \\
 & & \text{A} \quad \text{B} \\
 & & 1 : 10 \\
 & & \text{20,000} \quad \text{200,000}
 \end{array}$$

