

S1. Ans.(c)

Sol.

$$\begin{array}{rcccl} & \text{A} & : & \text{B} & : & \text{C} \\ (2000 \times 4 + 3000 \times 8) & : & (19000 \times 4 + 15000 \times 8) & : & [15000 \times 4 + 15750 \times 8] \\ = (24000 + 8000) & : & (76000 + 120000) & : & (60000 + 126000) \\ = 32000 & 196000 & 186000 & & \\ = 16 & : & 98 & : & 93 \end{array}$$

Total profit = 232047 Rs.

$$\text{B's share profit} = 232047 \times \frac{98}{207} = 109858$$

S2. Ans.(b)

Sol. Profit = capital \times Time

$$\text{Time} = \frac{\text{Profit}}{\text{Capital}}$$

Akhilesh: Prateek: Dimple

$$\text{Profit} = 60 : 55 : 24$$

$$\text{Capital} = 5 : 5 : 4$$

$$\text{Time} = 12 : 11 : 6$$

Hence, a : b : c = 12 : 11 : 6

S3. Ans(a)

Sol:

$$\begin{array}{rcccl} \text{Anurag} & : & \text{Bhargav} & : & \text{Chand} \\ 650000 & : & 50000 & : & 55000 \end{array}$$

$$13 : 10 : 11 \leftarrow \text{Capital ratio}$$

$$12 : 12 - x : 9 - x \leftarrow \text{Time ratio}$$

$$156 : 120 - 10x : 99 - 11x \leftarrow \text{profit ratio}$$

Given 50% = 156,

Then,

$$120 - 10x + 99 - 11x = 156$$

$$219 - 21x = 156$$

$$x = 3$$

Time for Bhargav = 9 months, Time for Chand = 6 months

Anurag invested alone in the business for 3 months.

S4. Ans.(c)

Sol. Let total capital = 100

$$\begin{array}{rcc} \text{P} & \text{Q} & \text{R} \\ 68 & 12 & 20 \end{array}$$

$$R's \text{ share} = \frac{65496}{100} \times 20$$

$$= 13099.2$$

S5. Ans.(d)

Sol: According to question

$$\begin{array}{lcl} \text{Parnav} & : & \text{Abhinav} & : & \text{Reshma} \\ 71500 & : & 55000 & : & 60500 \\ 13 & : & 10 & : & 11 \end{array}$$

(let Abhinav worked for x months then Reshma worked for (x-3)

months)

$$12 : x \quad x-3$$

$$\text{We have } 50\% = 13 \times 12 = 156$$

Remaining 50% got Abhinav and Reshma

$$\text{Then, } 10x + 11(x-3) = 156$$

$$x = 9$$

Hence Parnav alone financed the business = 12-9 = 3 months

S6. Ans.(c)

Sol.

$$\begin{array}{lcl} A & : & B \\ 2 \times 10 + \frac{3}{2} \times 2 & : & 1 \times 8 + \frac{1}{2} \times 4 \\ 23 & : & 10 \end{array}$$

S7. Ans.(a)

Sol. Data not sufficient to solve.

S8. Ans.(b)

Sol.

$$\begin{array}{lcl} A & B & C \\ 5 \times 6 & 7 \times 6 & 3 \times 6 \\ \hline 10 \times 6 & 3.5 \times 6 & 3 \times 6 \\ 90 & : & 63 & : & 36 \end{array}$$

$$\begin{array}{l} 10 : 7 : 4 \\ \downarrow \times 19000 \\ 76000 \end{array}$$

$$10 : 7 : 4 = 21 \xrightarrow{\times 19000} 3,99,000$$

S9. Ans.(b)

Sol. According to Question

$$6x \times 4 + \left(6x - \frac{9x}{12}\right) \times 8 : 5x \times 12 : 4x \times 12$$

$$24x + 42x : 60x : 48x$$

$$11 : 10 : 8$$

$$\text{Profit Share of A} = \frac{11}{29} \times 27724 = \text{Rs. } 10516$$

S10. Ans (b)

Sol: Let A's initial investment= 4z, B's initial investment= 5z, and

C's initial investment=3z

After 6 months, A's investment= 4z+50% of 4z=6z

After 4 months, B's investment= 5z+20% of 5z=6z

After 7 months, C's investment= 3z-(3z/3)=2z

Whole year investment of:-

$$A = (4z \times 6) + (6z \times 6) = 60z$$

$$B = (5z \times 4) + (6z \times 8) = 68z$$

$$C = (3z \times 7) + (2z \times 5) = 31z$$

C's profit= Rs. 1860

$$B's \text{ profit} = \text{Rs. } \frac{1860}{31} \times 68 = \text{Rs. } 4080$$

$$A's \text{ profit} = \text{Rs. } \frac{1860}{31} \times 60 = \text{Rs. } 3600$$

$$\text{Total profit} = ₹ 1860 + 4080 + 3600 = ₹ 9540$$