Partnership

Solution

1. Answer: (B)

Ratio of the profit of Srikant and Vividh
= 185000 : 225000 = 34 : 45
Sum of the ratios = 34 + 45 = 82
$\therefore Total\ profit\ earned\ = \frac{82}{45} \times 9000$
$= Rs.16400$

2. Answer:: (B)

Let the total time be 'T' months
After 5 months let the time remaining be 't' months
Initial investments are,
M = 5 × 90000/12 = 37500
N = 7 × 90000/12 = 52500
Ratio of profit share is,
{37500 × 5 + 37500 × 0.75 × (t - 3)} : (52500 × 5 + 52500 × 0.8 × t) = 725: 1372
{375 × (5 + 0.75t - 2.25)} : {525 × (5 + 0.8t)}
= 725: 1372
{5 × (2.75 + 0.75t)}/ {7 × (5 + 0.8t)}
= 725/ 1372
(2.75 + 0.75t)/ (5 + 0.8t) = 145/196
539 + 147t = 725 + 116t
31t = 186
t = 6
We get,
t = 6 months
Total time period = 5 + t = 11 months

3. Answer: (B)

Let period of investment of Pinki and Rinki be 2x and 3x units respectively.
Ratio of profit share

$Pinki$		$Rinki$
$6000 \times 2x$	:	$90000 \times 3x$
4	:	9

Profit share of Pinki = Rs. 20,000

4. Answer: (E)

Let Manoj invested Rs, x
ATQ, $\frac{x(9+2)}{8000 \times 9} = \frac{11}{8}$
$x = Rs.9000$

5. Answer: (B)

Let's Neeraj and Arjun invested Rs. 3x and Rs. 5x respectively
Ratio of profit of Neeraj and Arun
$= 3x \times 12 : (5x \times 4 + 4x \times 8)$
= 36x : 52x
= 9 : 13
∴ Profit share of Neeraj
$= \frac{9}{22} \times 880 = Rs.360$

6. Answer: (D):

The correct answer is Option 4 i.e. Rs. 13350
Investment by A = Rs.6000
Investment by B = Rs.8000
Investment by C = 8000 × 0.6 = Rs. 48000
A invested for 12 months, B invested for 4 months, C invested for 8 months.
Hence,
Ratio of shares of A, B and C = [6000 × 12]: [8000 × 4] : [48000) × 8] = 45: 20: 24
Given:
Share of A is Rs. 6750
Hence,
Total profit = [6750/45] × 89 = 150 × 89
= Rs. 13350

7. Answer: (E)

Three partners P, Q and R invested their amounts in ratio 2 : 5 : 7. At the end of six months P added some more amount such that his investment becomes equal to half of the sum of initial investment of 'Q' and 'R' and at the end of the year, Q's share in profit is Rs 425.
Let the amount invested by P, Q and R be 2x, 5x and 7x respectively and total profit be 'P'
⇒ ratio of profit = 2x × 6 + 6x × 6 : 5x × 12 : 7x × 12
⇒ ratio of profit = 4 : 5 : 7
⇒ Q's share in profit = 5/16 × P = 425
⇒ P = Rs. 1360
∴ required total profit = Rs. 1360

8. **Answer: (B)**
Two friends Pinki and Rinki entered into partnership by investing an amount of Rs. 6000 and Rs.9000 respectively. The ratio of their time period of investment is 2 : 3 and the profit share of Rinki is Rs.45000
Let the time period of investment of Pinki and Rinki be 2x and 3x.
⇒ ratio of profit = 6000 × 2x : 9000 × 3x
⇒ ratio of profit = 4 : 9
⇒ profit share of Pinki
= 45000 × 4/9 = Rs. 20000
∴ required profit share of Pinki = Rs. 20000

9. **Answer: (A)**
Let's assume investments of C be X.
From given data –
∴ Investments of B = 2X – – – – (1)
∴ Investments of A = 3 × 2X
∴ Investments of A = 6X – – – – (2)
∴ Investment of A : Investment of B : Investment of C = 6X : 2X : X
∴ Their profit will be in the ratio of 6X : 2X : X
As we can notice A invested 6X parts out of 9X parts.
∴ Profit of A = part of A's investment × total profit
∴ Profit of A = 6X/9X × 90000 = Rs. 60000

10. **Answer: (A)**
5x : 6x, Let B investment was used for y months
$8 \times 5x : 6x \times y = 5 : 9$
$\frac{40x}{6xy} = \frac{5}{9}$
y = 12

11. **Answer: (A)**
Investment = 4x :6x :7x
After 4 months
According to question
7x = 6x + x
So, C's initial investment = 7x which may happen only if A withdraws 75% of his investment.
Hence, new ratio of investment = x :6x :7x
= 1 :6 :7 for rest of months
⇒ Hence final investment ratio will be 2 : 6 : 7 [first 4 months investment + Last 8 months investment] 7 → 4200
∴ Annual profit'll be $15 \times \frac{4200}{7} = Rs.9000$

12. **Answer: (A)**
Let their initial investment be 7*x*, 5*x* and 3*x* respectively.
Ratio of their profit
$= 7x \times 6 + 3x \times 6 : 5x \times 12 : 3x \times 12$
$= 60x : 60x : 36x$
= 15 : 15 : 9
A's profit = $3600 \times \frac{39}{9} \times \frac{15}{39}$
= Rs. 6000

13. **Answer: (B)**
Ratio of profit of A, B and C
= (4 × 3) + (8 × 7) : (4 × 5) + (8 × 5) : (4 × 7) + (8 × 7)
= 17 : 15 : 21
Total profit = 150 × (17 + 15 + 21) = 7950

14. **Answer: (D)**
$P - 1500 \times 12$
$Q - 18000 \times 6$
$R - 10000 \times 8$
Ratio of their profit = 45 : 27 : 20
∴ Total profit earned = $\frac{92}{45} \times 4500 = 9200$

15. **Answer: (D)**
Total amount invested by Mohan = Rs (60000 × 4) + Rs (80000 × 6) + Rs (50000 × 2) = Rs (240000 + 480000 + 100000) = Rs 820000
Total amount invested by Vikas = Rs (50000 × 6) + Rs (80000 × 6) = Rs (300000 + 480000) = Rs 780000
Therefore, ratio in which profit will be divided between Mohan and Vikas = 820000: 780000 = 82: 78 = 41: 39

16. **Answer: (C)**
In third year,
A's investment = Rs. 50000 for 12 months
B's investment = Rs. 40000 for 12 months
C's investment = Rs. 60000 for 12 months
Hence,

⇒ A's share : B's share : C's share = 50000 : 40000 : 60000
⇒ A's share : B's share : C's share = 5 : 4 : 6
∴ C's share = (6/15) × 60000 = Rs. 24000

17. Answer: (D)
In second year,
A's investment = Rs. 50000 for 12 months
C's investment = Rs. 60000 for (12 – 3) = 9 months
C's share = Rs. 4500
Hence,
⇒ (50000 × 12) : (60000 × 9) = A's share : 4500
⇒ 10 : 9 = A's share : 4500
⇒ A's share = (10/9) × 4500
∴ A' share = Rs. 5000

18. Answer: (E)
A's investment = Rs. 50000 for 12 months
B's investment = Rs. 40000 for (12 – 4) = 8 months
∴ Ratio of their share in profit = (50000 × 12) : (40000 × 8) = 15 : 8

19. Answer: (C)
Let B invested in the company after 'x' months
A's investment = Rs. 50000 for 12 months
B's investment = Rs. 40000 for (12 – x) months
A's share = Rs. 12000
B's share = Rs. 5600
Hence,
⇒ (50000 × 12) : [40000 × (12 – x)] = 12000 : 5600
⇒ (5 × 12) : [4 × (12 – x)] = 120 : 56
⇒ 60 : (48 – 4x) = 120 : 56
⇒ (60 × 56)/120 = 48 – 4x
⇒ 28 = 48 – 4x
⇒ 4x = 20
⇒ x = 5
∴ B invested in the company after 5 months

20. Answer: (E)
As the time duration for which B invested his money is not known, his share of profit couldn't be determined.