PARTNERSHIP

SYNOPSIS

1. In order to start a business some amount is necessary. It is called capital. If one person cannot invest the amount, he takes the help of another person and runs the business. A business is generally undertaken by two or more persons. Such business which is undertaken jointly is called *partnership*. The money invested by the partners in the business is called investment.

2. **Partnership is of two types:** 1) General   2) Compound partnership

    In the first type period of investment is same partners divide profit or loss in the ratio of their investments. In the second type the investments and the periods of investment differ. Then their investments have to be reduced to investments per month or year. The profit or loss will be divided in the ratio of these converted investments.

Solved Examples :

1) **Two partners A and B started a business with capitals of Rs. 10000 and Rs. 15000 respectively. If the profits are Rs.6000, then find the share of each?**

Sol. Investment of A = Rs. 10000

Investment of B = Rs. 15000

Ratio of the investments of A & B = 10000 : 15,000 = 2 : 3

Total ratio = 2 + 3 = 5

Profit = 6000

Share of A = $\dfrac{2}{5} \times 6000 = $ Rs. 2400;   Share of B = $\dfrac{3}{5} \times 6000 = $ Rs. 3600

2) **Two partners A, B started with Capitals of 4,000/- & 5,000/- respectively. If B with draw from the business after 8 months. In what ratio will they divide the profit.**

Sol. Ratio of the investments of A and B = 4000 × 12 : 5000 × 8 = 48000 : 40000

                    Ratio of profits = 6 : 5

3) **Two partners A and B started a business with a capital of 5000/- and 8000/-. After 4 months B withdraw 2000 from his capital. In what ratio will they divide the profits.**

Sol. Total investments of A = 5000 × 12 = 60000

Total investments of B = 8000 × 4 + 6000 × 8 = 32000 + 48000 = 80000/-

Ratio of investments of A and B = 60000 : 80000 = 3 : 4

∴ Ratio of profits = 3 : 4

4) The capitals of A and B are in the ratio 4 : 5. If they investment Rs. 90000.- in a business what are their investments.

Sol. Total ratio = 4 + 5 = 9;   Total capital = 90000/-

Capital of A = $\dfrac{4}{9} \times 90000 = 40000/-$;

Capital of B = $\dfrac{5}{9} \times 90000 = 50000/-$

5) A, B, C started with a capital 8000/-, 10000/-, 12000/- respectively. After 6 months A with draw 3000/- where as B and C added 2000/- and 3000/- to their capitals In what ratio will they share their profits.

Sol. Capital for A last 6 months = 8000 – 3000 = 5000

Total investment of A = 8000 × 6 + 5000 × 6 = Rs. 78000/-

                     B = 10000 × 6 + 12000 × 6 = 132000/-

                     C = 12000 × 6 + 15000 × 6 = 162000/-

Ratio of the profits =78000 : 132000 : 162000 = 13:22:27

6) A, B share profits in the ratio 5 : 6. A started a business with a capital of 6,000/- and B joined the business after 4 months what is the capital of B.

Sol. Profit Ratio = Capital ratio

Let B capital be Rs. x   [Θ Period of capital = 12–4 = 8

$\Rightarrow$ 12 × 6000 : x × 8 = 5 : 6   12 × 6000 : x × 8 = 5 : 6

$\Rightarrow$ 40x = 6 × 12 × 6000   8x × 5 = 6 × 12 × 6000)

$x = \dfrac{6 \times 12 \times 6000}{40} = 6 \times 1800 = 10800/-$

7) A, B, C share a profit in the ratio 5 : 3 : 2. If A's share is 540/- , then what is the total profit?

Sol. Let profits be 5x/-, 3x/-, 2x/-

5x = 540 $\Rightarrow$ $x = \dfrac{540}{5}$ $\Rightarrow$ x = 108

Profit = 5x + 3x + 2x = 10x

Total profit = 10 × 108 = 1080/- ;

Total profit earned Rs. 1080

WORK SHEET

1. Partner ship is of _____ types

   1) 4   2) 1   3) 2   4) 3

2. The money invested by the partners n the business is called _____

   1) Partners   2) Partner ship   3) Investment   4) None

3. P and Q started a business with equal capital but 'Q' with drew from the business at the end of 9 months if at the end of the year. They made a profit of Rs 8540/-. Find the share of each.

   1) Rs 4,880/-   2) Rs 3,660/-   3) Both a & b   4) None

4. Lal started a business. After some time paul joined him. The ratio of the Investments is 3 : 4. If their profits at the end of the year are equal Find when paul joined in the business.

   1) 2Months after   2) 3Months after

   3) 3½Months after   4) None

5. David and Gopi started a business with a total investment of Rs 40,400/-. If total investments. David gets Rs50/- less. What is the share of each ?

   1) Rs 20. 402/-,Rs 19,998/-   2) Rs 20,402/-

   3) Rs 20. 402/-,Rs 18,998/-   4) None

6. Two partners A and B have started business with capitals of Rs. 6000 and Rs. 8000 respectively. If they made profit of Rs. 5,600 then the share of A is
   1) Rs.2400   2) Rs.3200   3) Rs.2800   4) Rs.2100

7. Ramani started a business with a capital of Rs. 8000/-. Vanita joined after 4 months with a capital 6000/-. If they earned a profit of 3600/-, then the share of Vanita is

   1) Rs.1500   2) Rs.1200   3) Rs.1800   4) Rs.2400

8. P and Q started a business with equal capital. But P with draw from the business at the end of 4 months. If at the end of the year they made a profit of Rs. 6400, then the share of P is

   1) Rs.2560   2) Rs.2640   3) Rs.7880   4) Rs.2240

9. Ramu started a business. After sometime Krishna joined him the ratio of the investments is 5 : 8. If the profits are 6000/- and 7200/-, then Krishna joined the business after

   1) 4 months   2) 2 months   3) 3 months   4) 6 months

10. Mahesh and Harish have started with investments 20,000/- and 30,000/- respectively. If after 3 months Harish withdraw 5000/- from his investment, then the ratio in which they divide the profits is

    1) 16 : 20   2) 16 : 22   3) 16 : 21   4) 16 : 23

11. A, B, C started the business with 6000/-, 8000/-, 4000/- respectively. After 4 months A withdraw Rs.   1000/-, where as B and C added 1000/-, each to their investment. If the end of the year, they get a profit of 11200/-, then the share of B is

    1) Rs. 5,600   2) Rs.5,000   3) Rs. 5,200   4) Rs. 5800

12. A and B started a business with a capital of Rs. 15000/-, B joined him after 2 months with a capital of Rs. 20000. Then the ratio in which profit are divided is

    1) 10 : 9   2) 8 : 9   3) 9 : 10   4) 9 : 8

13. A, B, C divided the profit in the 3:4:5. If their total investment is 1,44,000/-, then capital of B is

    1) Rs. 48,000   2) Rs. 36,000   3) Rs. 60,000   4) Rs. 64,000

14. Ramakrishna, Gopal and Hari Shared the profits in the ratio 4:5:6, If Hari earned 8400/- then the total profits earned in a year is
    1) Rs. 24,000   2) Rs. 22,000   3) Rs. 27,000   4) Rs. 21,000

15. A and B started a business with capitals of 7500/- and 8000/-. If they withdraw from the business after 8 months and 10 months the ratio in which they divide a profits is

    1) 3 : 8   2) 3 : 5   3) 3 : 4   4) 3 : 7

KEY & HINTS

WORK SHEET (KEY)				
1) 3	2) 3	3) 3	4) 2	5) 1
6) 1	7) 2	8) 1	9) 3	10) 3
11) 3	12) 3	13) 1	14) 4	15) 3

6. Ratio of capitals = 6000 : 8000 = 3 : 4
    Total ratio = 3 + 4 = 7
    Total profit = Rs. 5600/-

    $\therefore$ Share of A = $\dfrac{3}{7} \times 5600 = Rs.2400$

7. Investments of Ramani and Vanita for the year
    8000 × 12 : 6000 × 8 = 96000 : 48000 = 2 : 1
    Total ratio = 2 + 1 = 3
    Total profit = 3600/-

    $\therefore$ Share of Vanita = $\dfrac{1}{3} \times 3600 = Rs.\,1200$

8. Let the capitals be Rs. x/- each
    Investments for the year = x × 8 : x × 12 = 8x : 12x = 2 : 3
    Total ratio = 2 + 3 = 5
    Total profit = Rs. 6400/-

    $\therefore$ Share of P = $\dfrac{2}{5} \times 6400 = Rs.2560$

9. Let capital be 5x/- and 8x/-
    Let Krishna be in business for y months
    Investment Ratio = Profits ratio
    5x × 12 : 8x × y = 6000 : 7200
    $\Rightarrow$ 60x : 8xy = 6000 : 7200
    $\Rightarrow$ 30x : 4xy = 20 : 24
    $\Rightarrow$ 15x : 2xy = 5 : 6
    $\Rightarrow$ 15x × 6 = 2xy × 5

    $\Rightarrow$ 90x = 10xy y = $\dfrac{90}{10} = 9$

$\therefore$ y = 9 months

Krishna joined after 3 months   [$\ominus$ period of Business = 12 – 9 = 3]

10. Investment of Mahesh = 20000 × 12 = Rs. 240000/-

Investment of Harish = 30000 × 3 + 25000 × 9 = 90000 + 225000 = 315000/-

Ratio of profits = 240000 : 315000

$\qquad\qquad\qquad$ = 48   : 63   [$\ominus$ period of Investment = 12 – 3 = 9]

$\qquad\qquad\qquad$ = 16   : 21

11. Total investment of A = 6000 × 4 + 5000 × 8 = 64000/-

Total investment of B = 8000 × 4 + 9000 × 8 = 104000/-

Total investment of C = 4000 × 4 + 5000 × 8 = 56000/-

Ratio of investments = 64000 : 104000 : 56000

$\qquad\qquad\qquad\qquad$ = 16 :   26   : 14

$\qquad\qquad\qquad\qquad$ = 8 :   13   : 7

Total ratio = 8 + 13 + 7 = 28

The profit = 11,200/-

Share of B = $\dfrac{13}{28} \times 11200$ = Rs.5200

12. Ratio of Investments of A and B = 15000 × 12 : 20000 × 10

$\qquad\qquad\qquad\qquad\qquad\qquad\qquad$ = 180000 : 200000 = 9 : 10

13. Ratio of profits = Ratio of capitals = 3 : 4 : 5

Total ratio = 3 + 4 + 5 = 12

Total investment = 144000/-

$\therefore$ Capital of B = $\dfrac{4}{12} \times 144000$ = Rs.48000

14. Let profit be 4x, 5x, 6x

6x = 8400 $\Rightarrow$ x = $\dfrac{8400}{6}$ $\Rightarrow$ x = 1400/-

$\therefore$ Total profit = 15x = 15 × 1400 = Rs.21000

15. Total investment of A = 7500 × 8 = 60000/-

Total investment of B = 8000 × 10 = 80000/-

Ratio of profit = 60000 : 80000 = 3 : 4