



Partnership

Q1.

A and B started a business by investing 36,000 and Rs. 63,000. Find the share of each, out of the annual profit of Rs. 5500.

- (a) 2000, 3500
- (b) 2500, 3500
- (c) 3500, 2500
- (d) None of these

Q2.

A starts some business with Rs. 50,000. After 3 months B joins him with Rs. 70,000. At the end of the year, in what ratio should they share the profit

- (a) 1 : 3
- (b) 3 : 2
- (c) 1 : 5
- (d) None of these

Q3.

A started a business by investing Rs. 36,000. After 4 month B joined him with some investment. At the end of the year, the total profit was divided between them in the ratio of 9 : 7 How much capital was invested by B in the business?

- (a) Rs. 40,000
- (b) Rs. 42,000
- (c) Rs. 41,000
- (d) None of these

Q4.

A started some business with Rs. 26,000 After 3 months B joined him with Rs. 16,000. After some more time C joined them with Rs. 25,000. At the end of the year, cost of total profit of 15453, C gets 3825 as his share. How many months after B joined the Business did c Join?

- (a) 3
- (b) 4
- (c) 5
- (d) None of these

Q5.

A, B and C started a business with their investments in the ratio 1 : 2 : 4. After 6 month A invested the half amount more as before and B invested same the amount as before. While C withdrew 1/4th of the their investments. Find the ratio of their profits at the end of the year.

- (a) 5: 12: 13
- (b) 5 : 1: 14
- (c) 5: 12: 14
- (d) none of these

Q6.

A started a business with Rs. 52,000 and after 4 months B joined him with Rs. 39,000. At the end of the year out of the total profit B received total 20,000 including 25% of the profit as commission for managing. What amount did A receive

- (a) Rs 20,000
- (b) Rs 10,000
- (c) Rs15,000
- (d) None of these

Q7.

A working partner gets 20% as his commission of the profit after his commission is paid, If the working partner's commission is Rs. 8000, Then what is the total profit in the business?

- (a) Rs.47,000
- (b) Rs.48,000
- (c) Rs. 45,000
- (d) None of these

Q8.

Pardeep Kumar Reader publication makes a profit of 9,00,000, 20% of which is paid as taxes. If the rest is divided among the partners P, Q and R in the ratio 1:(3/2): 2, then the shares of P, Q and R are respectively.

- (a) Rs. 2,40,000; Rs. 3,20,000; Rs. 1,60,000
- (b) Rs.3,20,000; Rs.2,40,000; Rs.1,60,000
- (c) Rs.1,60,000; Rs.23,20,000; Rs.22,40,000
- (d) Rs.1,60,000; Rs.2,40,000; Rs.3, 20,000

Q9.

We have to divide a sum of Rs. 13,950 among three persons A, B and C. B must get the double of A's share and C must get Rs 50 less than the double of B's share. The share of A will be : Rs 13,950

- (a) Rs. 1950
- (b) Rs. 1981.25
- (c) Rs. 2000
- (d) Rs. 2007

Q10.

A started business with Rs. 45,000 and B joined afterward with 30,000. If the profit at the end of the of one year was divided in the ratio 2 : 1 respectively, then B would have joined A for business after,

- (a) 1 month
- (b) 2 month
- (c) 3 month
- (d) 4 month

Q11.

X and Y are partners in a business, They invest in the ratio 5 : 6, at the end of 8 months X withdraws his capital. If they receive profits in the ratio of 5: 9, Find how long Y's investment was used?

- (a) 12 months
- (b) 10 months
- (c) 1.5 months
- (d) 14 months

Q12.

Four milkmen rented a pasture. M put to graze 16 cows for 3 months and N 42 cows for 4 months, O 18 cows for 6 months and P 42 cows for 2 months. If M's share of rent be Rs. 2400, the rent paid by O is.

- (a) Rs. 3200



- (b) Rs. 4200
- (c) Rs. 4000
- (d) Rs. 5400

Q13.

A, B and C subscribe Rs. 47000 for a business. If A subscribes Rs. 7,000 more than B and B Rs. 5,000 more than C, then out of total profit of Rs. 4700, C receives.

- (a) Rs. 1200
- (b) Rs. 4500
- (c) Rs. 1000
- (d) None of these

Q14.

11250 are divided among A, B and C so that A may receive one half as much as B and C together receive and B receives one-fourth of what A and C together receive. The share of A is more than that of B by.

- (a) Rs. 2500
- (b) Rs. 1500
- (c) Rs. 1800
- (d) Rs. 650

Q15.

Two partners X and Y start a business by investing Rs. 50,000 and 40,000 respectively, What will the ratio of their profits at the end of the year

- (a) 5:4
- (b) 3:6
- (c) 4:5
- (d) 6 :3

Q16.

X starts a business with Rs. 25,000 after 4 months Y joins him with Rs. 20,000. What will be the ratio of their profit at the end of the year.

- (a) 4: 8
- (b) 5: 10
- (c) 15: 8
- (d) 9 : 18

Q17.

A starts a business with 21,000/- and later B joins him with 36,000/ - After how many months did B join if the profit is distributed in equal ratio?

- (a) 5
- (b) 7
- (c) 6
- (d) 9

Q18.

A and B started a business investing amount of Rs. 1, 85,000 and Rs. 2,25,000 respectively. if B's share in the profit earned by them is Rs. 9,000 then what is the total profit earned by them together ?

- (a) Rs. 17,000
- (b) Rs. 16,400
- (c) Rs. 16,800
- (d) Rs. 17,800

Q19.

A and B started a boutique investing amounts of Rs. 35,000 and 56,000 respectively. If A's share in the profit earned by them in 45,000, then what is the total profit earned?

- (a) Rs. 81,000
- (b) Rs.1,27,000
- (c) Rs. 72,000
- (d) Rs. 1,17,000

Q20.

A and B invested amount of Rs 40,000 and 75,000 respectively. At the end of five year they got a total dividend of Rs. 46,000, what is A share in the dividend?

- (a) Rs. 16,500
- (b) Rs. 15,500
- (c) Rs. 15,000
- (d) Rs. 16,000

Q21.

A invested an amount of Rs. 25,000 and started a business. B joined him after one year with an amount of Rs. 30,000. After two years from starting the business, they earned the profit of Rs. 46,000. What will be B's share in the profit?

- (a) Rs. 14,000
- (b) Rs. 12,000
- (c) Rs. 17,250
- (d) Rs. 20,000

Q22.

Mr. A opened a workshop investing 40,000. He invested additional amount of 10,000 every year. After two years his Student B joined him with amount of 85,000. There after B did not invest any additional amount. On Completion of four year from the opening of workshop they earned an amount of Rs. 1,95,000. What will be A's share in the earning.

- (a) 8500
- (b) 1, 10,000
- (c) 1,35,00
- (d) 95,000

Q23.

X and Y started a business with their capitals in the ratio 7:9. At the end of 8th month, X withdraws his capital. If they receive profits in the ratio 8: 9, Find how long Y's capital was used,

- (a) 4 months
- (b) 6 months
- (c) 7 months
- (d) 8 months

Q24.

X and Y enter into a partnership with capitals in the ratio 5 : 6 and at the end of 8 months, X withdraws. If they receive profit in the ratio of 5:9 . Find how long Y's capital was used.

- (a) 8 months
- (b) 9 months
- (c) 11 months



(d) 12 months

Q25.

Two partners invest Rs. 125,000 and Rs. 85,000 respectively in a business and agree that 60% of the profit should be divided equally between them and the remaining profit is to be divided into ratio of their capitals, If one partner gets Rs. 300 more than the other. Find the total profit made in the business.

- (a) Rs. 3739.50
- (b) Rs. 3937.50
- (c) Rs. 3749.50
- (d) Rs. 3947, 50

Q26.

Two brother invested Rs. 50,000 and Rs. 70,000 respectively in a business and agreed that 70% of the profits should be divided equally between them and the remaining profit in the ratio of investment. If one Brother gets Rs. 90 more than the other, Find the total profit made in the business.

- (a) Rs. 1200
- (b) Rs. 1400
- (c) Rs. 1600
- (d) Rs. 1800

Q27.

The investments made by X and Y are in the ratio 3 : 2. If 5% of total profit is donated and X gets & 8,550 as his share of profit then what is the amount of total profit.

- (a) 14000
- (b) 15,000
- (c) 11,050
- (d) 12, 020

Q28.

A, B and C enter into a partnership with capitals in the ratio 5 : 6 : 8. At the end of the business term, they received the profit in the ratio 5 : 3 : 12. Find the ratio of time for which they contributed their capitals?

- (a) 2 : 1 : 3
- (b) 1:2: 3
- (c) 2 : 3 : 1
- (d) 3 : 2: 1

Q29.

X and Y entered into a partnership investing Rs. 16,000 and Rs. 2,000 respectively. After 3 months X withdrew Rs. 5000, while Y invest Rs. 5000 more. After 3 months, Z joins the business with a capital of Rs. 21,000. After a year they obtained a profit of Rs 26,400. By what amount does exceed the share of Z.

- (a) Rs. 3600
- (b) Rs. 3800
- (c) Rs. 4600
- (d) Rs. 4800

Q30.

X, Y and Z are partner in a business. If X's capital is twice of Y's capital and Z's capital is three times to that of Z's capital then find the ratio of their investments.

(a) 6 : 3 : 1

(b) 3 : 8 : 1

(c) 4: 9: 3

(d) 3 : 1 : 5

Q31.

X and Z invest capital in the ratio of 2 : 1 while X and Y invest capital in the ratio of 3 : 2. If their annual profit is Rs. 1,57,300 then what is Y share?

- (a) Rs. 48,400
- (b) Rs. 58,809
- (c) Rs. 48,810
- (d) Rs. 47,782

Q32.

X, Y and Z enter into partnership X invests 1/4 part of total capital one-fourth of the time. Y contributes one fifth of the capital for half of the time. Z contributes the remaining capital of the whole time. How should they divided a profit of Rs. 1140.

- (a) 100, 160, 880
- (b) 110, 140, 860
- (c) 120, 150, 840
- (d) 140, 170, 830

Q33.

A, B and C are three partners in a business, A, whose money has been used for 4 months, claims 1/8 of the profit, B whose money has been used for 6 months, claims 1/3 of the profit. C had invested Rs. 1560 for 8 months. How much money did A and B contribute ?

- (a) 740, 1250
- (b) 730, 1240
- (c) 720, 1280
- (d) Rs. 750, 126034

Q34.

In a partnership X invests 1/6th of the capital for 1/6th of the time, Y invests 1/3rd capital for 1/3rd time and Z invests the remaining capital for the whole time. If at the end of the year the profit earned is Rs. 23,000 then what will be Y share?

- (a) 5500
- (b) Rs. 5000
- (c) Rs. 6000
- (d) Rs. 4000

Q35.

A and B are two partners in a firm sharing the profit in the ratio 4 : 5. If the firm earns a profit of Rs. 14,130 then profit to be received by B

- (a) 6,280
- (b) 7,850
- (c) 1,570
- (d) 3,140

Q36.

X and Y take a grass ground on lease for K300 for grazing their animals. If X grazes 10 animals for 5 weeks and Y grazes 15 animals for 7 weeks. The ratio in which they should divide the rent is :



- (a) 1: 2
- (b) 10 : 21
- (c) 11: 20
- (d) 2 :1

Q37.

A and B started a business investing amounts in the ratio of 2 : 3. If A has an additional amount of Rs. 10,000, their ratio of investment would have been 3 : 2, The amount invested by A was :

- (a) Rs. 8,000
- (b) Rs. 12,000
- (c) Rs. 18,000
- (d) Rs. 20,000

Q38.

The ratio of investments of two partners X and Y is 11 ; 12 and the ratio of their profit is 2: 3. If X invested the money for 8 months, then the time for which Y invested the money is :

- (a) 8 months
- (b) 9 months
- (c) 10 months
- (d) 11 months

Q39.

A, B and C started a business with R47,000. A puts in Rs. 5,000 more than B and B 3,000 more than C. The share of A out of the profit of Rs. 14,100 will be :

- (a) Rs. 3,600
- (b) Rs. 4,500
- (c) Rs. 6,000
- (d) Rs. 6,300

Q40.

A and B enter into partnership. At the end of 9 months B withdraws but A's capitals is used for one month more. If they receive profit in the ratio of 5: 6, then the ratio of their capital is :

- (a) 3:4
- (b) 4:3
- (c) 5:6
- (d) 6:5

Q41.

A, B and C hired a car for Rs. 4, 160. A used it for 7 hours. B for 8 hours and C used it for 11 hours. The rent shared by A will be

- (a) Rs.960
- (b) Rs. 1120
- (c) Rs. 1,260
- (d) Rs. 1,760

Q42.

A, B and C are three partners in a business. The profit share of A is 3/16 of the profit and B's share is 1/4 of the profit. If B receives Rs. 243, then the amount received by B will be :

- (a) Rs. 90
- (b) Rs. 96
- (c) Rs. 108

(d) Rs. 120

Q43.

A is working partner and B is sleeping partner in business. A puts in Rs. 5,000 and B puts in 6000 Rs. A received 15% of the profit for managing the business and the rest is divided in proportion to their capitals. The amount received by A out of the profit of Rs. 880 in all is:

- (a) Rs. 132
- (b) Rs. 340
- (c) Rs. 472
- (d) Rs. 492

Q44.

A starts business with a capital of Rs. 14,000, five months later B joins and further two months later C joins them. If the profit sharing ratio in the end of year is 4 : 3 : 2, then the money invested by C was:

- (a) 18,000
- (b) 16,800
- (c) 18,600
- (d) 10,800

Q45.

A, B and C become partners in a business. A contributes 1/3 of the capital for 1/4 of the time B contributes 1/5 of the capital for 1/6th of the time and C the rest of the capital for the whole time. If the profit is Rs. 1,820, then the A's share in profit is

- (a) Rs. 130
- (b) Rs. 260
- (c) Rs. 292
- (d) Rs. 304

Q46.

In a business A and B gained some amount in a certain ratio. B and C received the profit in the same ratio as that of A and B. If A received Rs. 6,400 and C received Rs. 10,000. Find the share of B.

- (a) Rs. 2000
- (b) RS. 4,000
- (c) Rs. 8,000
- (d) Rs. 10,000

Q47.

The capital of A and B are Rs. 20,000 and Rs. 4,000 respectively. A is entitled to be paid a salary of 1,200 per annum being a working partner. If the gross profit for one year is Rs. 1,800, their shares in the profit are respectively

- (a) Rs. 500, Rs. 3100
- (b) Rs. 1200, Rs. 3600
- (c) Rs. 1,700, Rs. 1,300
- (d) Rs. 1,700, Rs. 100

Q48.

A and B are partners who share profit and loss in the ratio of 3:2, They agree to take C into partnership of 1/4th share of profit. The new profit sharing ratio will be :

- (a) 9 : 6 : 5



- (b) 5: 6: 9
- (c) 6: 5: 9
- (d) 9 : 5 : 6

Q49.

A and B share profits and losses in a firm in the ratio of 3 : 2 centered in this first as new partner his profit sharing ratio is $\frac{1}{4}$. If C has taken his share of profit from A and B in equal ratio, then the new profiting ratio will be

- (a) 19: 11 : 1
- (b) 19: 11 : 10
- (c) 10: 11:9
- (d) 10: 11 : 19

Q50.

A, B and C share the profit in the ratio of 2 : 3 : 7. If the average gain is 38,000, then B's share is :

- (a) Rs. 2,000
- (b) Rs. 1,000
- (c) Rs. 21,500
- (d) Rs. 6000

Q51.

A, B and C share profit in the ratio of $\frac{1}{4} : \frac{1}{6} : \frac{1}{2}$. If C retires , they share the profit of C in the ratio of 4: 5 respectively. The new profit sharing ratio of A and B will be :

- (a) 55 : 53
- (b) 53: 55
- (c) 5 : 3
- (d) 3 : 5

Q52.

A, B and C enter into partnership. A puts in Rs. 1200 for 6 months, B Rs. 800 for 7 months and C Rs. 600 for 8 months . The share of A out of a profit of Rs. 396 is ;

- (a) Rs. 162
- (b) Rs. 62
- (c) Rs. 108
- (d) Rs. 18

Q53.

A and B enter into partnership investing Rs. 48,000 and Rs. 60,000 respectively. After 3 months, A withdraws Rs. 8,000 while B invests Rs. 6,000 after 6 months of starting of business. Out of the total amount of profit, if A gets Rs. 12,000 as his share at the end of the year total profit is :

- (a) Rs. 24,000
- (b) Rs. 30,000
- (c) Rs. 36,000
- (d) Rs. 37,000

Q54.

M, P and Q together started a business. M invested Rs. 6,500 for 6 months, P invested Rs. 8,400 for 5 months and Q invested Rs. 10,000 for 3 months. M is working member for which he gets 5% of total profit extra. If the total gain is Rs. 7,400, then Q's share is :

- (a) 1,900
- (b) 2,100
- (c) 3,200

(d) Data are incomplete

Q55.

A,B and C jointly start a business A puts in Rs. 15,000 for 8 months B puts in Rs.12,000 for 9 months and C puts in Rs. 8,000, for the whole year. In the end of the year there is a profit of Rs. 10,800. The difference between A's share and C share in the profit will be

- (a) 800
- (b) 600
- (c) 1200
- (d) 1800

Q56.

A started a business by investing Rs. 50,000. After a month's B joined her by investing Rs. 75,000. After its 6 months C joined with Rs. 1,25,000. What is the ratio of profit shared after 2 years among A, B and C?

- (a) 4: 5 : 6
- (b) 8: 9 : 10
- (c) 8:9:12
- (d) 4: 5: 8

Q57.

A starts a business with Rs. 45,000. After 6 months B enters in his business with Rs. 80,000. After one year C invests Rs. 120,000. In what ratio the profit will be divided among A, B and C after two years?

- (a) 9 : 16 : 24
- (b) 3 : 4 : 4
- (c) 3 : 4 : 8
- (d) 3 : 3 : 8

Q58.

Three partner A, B and C started a business by investing Rs. 48000 each, after 6 months A left the business, after 10 months B left the business and after 12 months C left the business. If total earned profit is Rs. 5250, then find the share of A, B and C?

- (a) Rs. 1125, 1825, 2250
- (b) Rs. 1125,1800, 2250
- (c) Rs. 1125, 1870, 2250
- (d) Rs. 1145, 1256, 2350

Q59.

Three partners started a business by investing Rs. 60,000 , Rs. 80,000 and Rs. 1,20,000 respectively. First partner left the business after 4 months, second after 9 months and third remained in the business for the whole year. At the end of year the total profit earned is Rs.1,60,480. Then find their shares of profit.

- (a) Rs. 16840, Rs. 44188, Rs. 92686
- (b) Rs. 16048, Rs. 48144, Rs. 96288
- (c) Rs. 16042, Rs. 14842, Rs. 9862
- (d) Rs. 15000, Rs. 13423, Rs. 7562

Q60.

A, B and C have invested a sum of Rs. 12500 in a business. B invested Rs. 15000 more than A and C invested RS, 20,000 more than B. If the total earned



profit is Rs. 37450 at the end of year, then find their share of profit.

- (a) Rs.7490, Rs.11984, Rs.17976
- (b) Rs.8480, Rs.7550, Rs.8560
- (c) Rs.7940, Rs.7054, Rs.17500
- (d) Rs.5100, Rs.6943, Rs.7140

Q61.

A started a business by investing Rs. 42000. After few months B joined by investing Rs. 49,000. If at the end of Year A got Rs. 9000 and B got Rs. 7,000 as a share of their profit. Then after how many months. A joined the business.

- (a) 1 month
- (b) 4 months
- (c) 2 months
- (d) 3 months

Q62.

A started a business by investing some money and B invested Rs. 5000 more than that of A. A remained in business for 5 months and B remained in business 1 month more than A. out of the total profit of Rs. 26000, B got Rs. 6000 more than A. Find the capitals invested A and B.

- (a) Rs. 29,000, Rs. 18,000
- (b) Rs. 25,000, Rs. 30,000
- (c) Rs. 15,000, Rs. 10,000
- (d) Rs. 15,000, Rs. 20,000

Q63.

A, B and C invested money in the ratio of $1/2:1/3:1/5$ in a business. After 4 months. A doubled his investment and after 6 months B halves his investment. If the total profit at the end of year be Rs. 34650 then find the share of each in profit.

- (a) Rs. 20,000, Rs. 25,000, Rs. 18,000
- (b) Rs. 15,500, Rs. 27, 200, Rs. 20,450
- (c) Rs. 22,500, Rs. 6750, Rs. 5400
- (d) Rs. 10350, Rs. 21,540, Rs. 12,050

Q64.

A and B started a business by investing Rs. 36,000 and Rs. 45,000 respectively . After 4 months B with draws $4/9$ of his investment its 5 months After she again invested $11/9$ of its original investment. If the total earned profit at the end of the year, is Rs. 117240, then who will get more money as a share of profit and how much ?

- (a) A, Rs. 15, 500
- (b) B, Rs. 12, 450
- (c) A, Rs. 14,245
- (d) B, Rs. 13,560

Q65.

A, B and C started a business by investing Rs. 24,000, Rs. 32000 and Rs. 18000 respectively, A and B are active partners and get 15% and 12% of total profit and remaining profit is to be distributed among them in the

ratio of their investment. If C got total Rs. 65700 as a profit, what was the total amount of profit

- (a) Rs. 4,70,000
- (b) Rs. 3,70,00
- (c) Rs. 3,45,000
- (d) Rs. 1, 57,00066

Q66.

A, B , C hired a pasture. A grazed 12 cows, 2 hours every day, B grazed 16 cows 4 hour every day for 6 months and C grazed 6 cows 9 hours everyday for 2 months. If A has paid Rs. 1152 as a share of fare. Find the amount of total rent

- (a) Rs. 1413
- (b) Rs. 1214
- (c) Rs. 1764
- (d) Rs. 1102

Q67.

A started a business with the capital of Rs. 500. After 2 months B joined A with Rs. 400. 6 months after the business started C joined with Rs. 800. If the total profit earned at the end of the year is Rs. 444 find the share of their profit.

- (a) Rs. 180, Rs. 120, Rs. 144
- (b) Rs. 150, Rs. 130, Rs. 123
- (c) Rs. 160 Rs. 141, Rs. 125
- (d) Rs. 141, Rs. 110, Rs. 140

Q68.

A and B started a business in partnership by investing Rs. 10,000 and Rs. 4000 respectively. Condition of partnership is that B got Rs. 100 per month for management of the business. After paying 5% interest on the capital, annual profit has distributed in the ratio of their investment. Find share of their profit, if the profit is Rs. 4000.

- (a) Rs. 3000 each
- (b) Rs. 2500 each
- (c) Rs. 1500 each
- (d) Rs. 2100 each

Q69.

A, B and C are partners in a business partnership. An invested Rs. 4000 for whole year. B invested Rs. 6000 initially but increased this investment upto Rs. 8000 at the end of 4 months, while C invested Rs, 8000 initially, but withdraw Rs. 2000 at the end of 9 months, At the end of year total earned profit is Rs. 16950, find their share of profit.

- (a) Rs. 3600, Rs.6600, Rs.6750
- (b) Rs.2000, Rs.33050, Rs.55400
- (c) Rs.2450, Rs.2460, Rs.1456
- (d) None of these

Q70.

A, B and C started a business in partnership and invested in the ratio of $1/4:1/3:1/6$. After 4 months A withdraw half of his investment and after its 2 months B withdraws $1/3$ of its investment. If the total earned



profit at the end of year is Rs. 14,000. Find the share of their profit

- (a) Rs.1500, Rs.2450, Rs. 2145
- (b) Rs.3000, Rs. 4500, Rs. 2100
- (c) Rs.4000, Rs.3500, Rs.1254
- (d) Rs.4200, Rs.5600, Rs.4200

Q71.

Three partners A, B and C invested in the ratio of 5/4:4/5:6/5 in a business. After 3 months A increased his capital by 50% if the total profit of Rs. 35,700 earned at the end of year, Find what was the A's share of profit?

- (A) Rs. 12,000
- (b) Rs. 16,500
- (c) Rs. 13,000
- (d) Rs. 15,600

Q72.

Out of total capital required to start a business A invested 30%, B Invested 2/5th and C invested the remaining capital. At the end of one year sum of Rs. 4000 is earned as a profit which is 20% of the capital given by B, then find how much C invested in the business?

- (a) Rs. 25000
- (b) Rs.10000
- (c) Rs.15000
- (d) Rs.12450

ANSWER :

| | | | | | | | | | | | | | | |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 a | 2 d | 3 b | 4 a | 5 c | 6 a | 7 c | 8 d | 9 c | 10 c | 11 a | 12 d | 13 c | 14 b | 15 a |
| | 16 c | 17 a | 18 b | 19 d | 20 d | 21 c | 22 b | 23 c | 24 d | 25 b | 26 d | 27 b | 28 a | 29 a |
| | 30 a | 31 a | 32 a | 33 c | 34 d | 35 b | 36 b | 37 a | 38 d | 39 c | 40 a | 41 b | 42 c | 43 c |
| | 44 b | 45 b | 46 c | 47 d | 48 a | 49 b | 50 d | 51 a | 52 a | 53 b | 54 a | 55 a | 56 b | 57 |
| b | 58 c | 59 b | 60 a | 61 b | 62 d | 63 c | 64 d | 65 b | 66 c | 67 a | 68 d | 69 a | 70 d | 71 |
| b | 72 c | 73 a | 74 | | | | | | | | | | | b |

1.

(a) A : B
 Capital → 36,000 : 63,000
 4 : 7

Note → When time is same then profit will divided in the ration of their capital.

∴ (4+7) units = Rs. 5500
 11 units = Rs. 5500
 1 unit = Rs. 5500/11 = Rs. 500
 Share of A = 500 × 4 = Rs. 2000
 Share of B = 500 × 7 = Rs. 3500

2.

(d) A : B
 Capital → 50,000 : 70,000
 5 : 7
 Time → 12 : 9
 Profit → 60 : 63
 20 : 21

Q73.

A and B started a business in partnership by investing in the ratio of 7 : 9. After 3 months. A withdraw 2/3 of its investment and after 4 months from the beginning B withdraw 100/3% of its investment. If a total earned profit is Rs. 10201 at the end of 9 months, find the share of each in profit.

- (a) Rs. 3535, Rs. 6666
- (b) Rs. 3055 , Rs. 5555
- (c) Rs. 4503 , Rs. 1345
- (d) Rs. 3545, Rs 3333

Q74.

Three partners invested Rs. 42000, Rs. 48000 and Rs. 32000 respectively. Partnership condition is that, each will the get interest on his capital at the rate of 7% p.a. and the remaining profit will be divided in the ratio of their capitals. If at the end of the year the total profit is Rs. 32940, then find the share of A in profit

- (a) Rs. 12960
- (b) Rs. 11340
- (c) Rs. 8640
- (d) None of these

Required Ratio of profits = 20 : 21

3. (b) Let the capital invested by B = Rs. X

A : B
 Capital → 36,000 : x
 Time → 12 : 8
 3 : 2

Profit → 108,000 : 2x

According to the question,
 108,000/2x = 9/7

x = 108,000/18 = 42,000

Required investment B = Rs. 42,000

Alternate : Note :- To save your valuable time in such type of question try to use below given formula.

$C_1 \times T_1 / C_2 \times T_2 = P_1 / P_2$

Where C_1 and C_2 are the capitals.

T_1 and T_2 are time periods.

P_1 and P_2 are profits.

Let capital invested by B = Rs. X



$$36000 \times 12 / x \times 8 = 9/7$$

$$x = \text{Rs. } 42000$$

4. (a)
According to the question,
(312+144+25T) units = 15,453
1 unit = 15,453/(456+25T)
Share of C
= 14,453/(456+25T) \times 25T = 3825
Note : Because C's share = Rs. 3825.
101T = 456 + 25 T
76 T = 456
T = 6 months
Required time = (9-6) = 3 months
Therefore C joined 3 months later than B joined
5. (c) Note : We can assume values as per our need out the ration of values should not be changed.
A : B : C
Capital \rightarrow 2x : 4x : 8x
Total capital invested by A = (2x+6+3x \times 6) = 30x
Total capital invested by B = (4x \times 6 + 8x \times 6) = 72x
Total capital invested by C = (6 \times 8x + 6x \times 6) (48x + 36x) = 84x

New ratio of capitals:

$$A : B : C$$

$$\text{Capital} \rightarrow 30x : 72x : 84x$$

$$\text{Profit} \rightarrow 5 : 12 : 14$$

Note : Profit would be divided in the ratio of their capitals.

Required ratio of their profit = 5 : 12 : 14

6. (a)
- | | | | | |
|-----------------------|--------|---|--------|--|
| | A | : | B | |
| Capital \rightarrow | 52,000 | : | 39,000 | |
| | 4 | : | 3 | |
| Profit \rightarrow | 12 | : | 8 | |
| | 3 | : | 2 | |
| Profit \rightarrow | 12 | : | 6 | |
| | 2 | : | 1 | |

Let profit of A = 200

and Profit of B = 100

Total Profit = 300 units

Per running business B received

$$= 300 \times 25 / 100 = 75 \text{ units}$$

Note : Remaining profit will be divided in the ration of their capitals.

$$\therefore \text{Profit of A} = 225/3 \times 2 = 150 \text{ units}$$

$$\text{Profit of B} = 225/3 \times 1 = 75 \text{ units}$$

$$\text{Total profit of B} = (75+15) = 150 \text{ units}$$

According to the question,

$$150 \text{ units} = \text{Rs. } 20,000$$

$$1 \text{ unit} = \text{Rs. } 20,000 / 150 \times 150 = \text{Rs. } 20,000$$

7. (c) Let the total profit = Rs. K.

According to the question,

Remaining profit after paying 20 % working

Partner's commission = (k= 8000)

$$\therefore (K-8000) \times 20/100 = 8000$$

$$k = 48000$$

$$\therefore \text{Total profit} = \text{Rs. } 48,000$$

8. (d) P : Q : R

$$\text{Capital} \rightarrow 1 : 3/2 : 2$$

$$\text{Profit} \rightarrow 2 : 3 : 4$$

Note : Profit would be divided in the ration of their capitals.

$$\text{Profit} = (2x+3x+4x) = 9x \text{ units}$$

According to the question,

$$9x = 9,00,000 \times 80/100$$

$$9x = 7,20,000$$

$$x = 80,000$$

$$\text{Profit of P} = 2x = 2 \times 80,000 = \text{Rs. } 1,60,000$$

$$\text{Profit of Q} = 3x = 3 \times 80,000 = \text{Rs. } 2,40,000$$

$$\text{Profit of R} = 4x = 4 \times 80,000 = \text{Rs. } 3,20,000$$

9. (c) Let the share of A = Rs. X

According to the question,

$$A : B : C$$

$$\text{Capital} \rightarrow x : 2x : (4x-50)$$

$$(x+2x+4x-50) = 13,950$$

$$7x-50 = 13,950$$

$$7x = 14,000$$

$$x = 2000$$

Share of A = Rs. 2000

10. (c) Capital of A (i) Rs. 45,000

Capital of B (ii) Rs. 30,000

$$\text{Ration of } P_1 : P_2 = 2 : 1$$

Now by using formula,

$$\frac{C_1 T_1}{C_2 T_2} = \frac{P_1}{P_2}$$

$$\frac{45000 \times 12}{30000 \times T_2} = \frac{2}{1}$$

$$T_2 = 9$$

$$T_2 = 9$$

$$T_2 = 9$$

Then B would join business after = 3 months

- 11.

(a) Let Y's investment is used for T months

\rightarrow Now by using formula.

$$\frac{5 \times 8}{6 \times T_2} = \frac{5}{9}$$

$$T = 12 \text{ months}$$



12. (d)

| | M | N | O | P |
|-----------------|----|----|-----|----|
| No. of lows → | 16 | 20 | 18 | 42 |
| Time → | 3 | 2 | 6 | 2 |
| Ratio of Rent → | 48 | 80 | 108 | 84 |
| | 12 | 20 | 27 | 21 |

According to the question,
12 units Rs. 2400
1 unit = Rs. 2400/12

27 units = Rs. 2400/12 × 27 = Rs. 5400

13. (c) Let C subscribes the business = Rs. X

| | A | B | C |
|-----------|-----------|----------|---|
| Capital → | (x+12000) | (x+5000) | x |

Note : Profit would be divide in the ratio of their capitals.

According to the question,
(x+12000) + (x+5000) + x = 47000
3x + 17000 = 47000
3x = 30000
x = 10,000

| | A | B | C |
|--------------------|-------------|-------|-------|
| Capital → | 22,000 | 15000 | 10000 |
| Profit → | 22 | 15 | 10 |
| (22+15+10) units = | 4700 | | |
| 1 unit = | 4700/47=100 | | |

Share of C = 10 units = 10 × 100 = Rs. 1,000

14. (b)

| A | B+C |
|----------|---------------------|
| 1_{x5} | $2_{x5} \dots (i)$ |
| B | A+C |
| 1_{x3} | $4_{x3} \dots (ii)$ |

Note : The total sum of A, B and C will be same.
So equate the sum of both the equations.
After that new ration, (A, B and C)

| | |
|---|----------------|
| A | : B+C |
| 5 | : 10.....(iii) |
| B | : A+C |
| S | : 12.....(iv) |

From equation (iii) and (iv)

| | | |
|---|-----|-----|
| A | : B | : C |
| 5 | : 3 | : 7 |

According to the question,
(5+3+7) units = Rs. 11,250
15 units = Rs. 11,250
1 unit = Rs. 750

Different in shares of A and B
= (5-3) × 750 = Rs. 1500

15. .

| | | |
|-----|---|-----|
| (a) | X | : Y |
|-----|---|-----|

| | | |
|-----------|--------|----------|
| Capital → | 50,000 | : 40,000 |
| Time → | 1 | : 1 |
| Profit → | 50,000 | : 40,000 |
| | 5 | : 4 |

Note : Always remember when time is same the Profit

Will be divided in the ratio of their profit.

16. (c)

| | X | : Y |
|-----------|--------|----------|
| Capital → | 25,000 | : 20,000 |
| | 5 | : 4 |
| Time → | 12 | : 8 |
| Profit → | 60 | : 32 |
| | 15 | : 8 |

∴ Hence Required ratio = 15 : 8

17. (a)

| | |
|----------------|------------|
| Capital of A = | Rs. 21,000 |
| Capital of B = | Rs. 36,000 |

By using formula,

$$\frac{C_1 T_1 = P_1}{C_2 T_2 = P_2}$$

$$\frac{21000 \times 12}{36000 \times 2} = \frac{1}{1}$$

$$T_2 = 7 \text{ months}$$

∴ so B joined business after (12-7=5) months

18. (b)

| | A | : B |
|-----------|----------|------------|
| Capital → | 1,85,000 | : 2,25,000 |
| Profit → | 37 | : 45 |
| | ↓ × 200 | ↓ × 200 |
| | 7400 | : 9000 |

Total profit = (7400+9000) = Rs. 16,400

19. (d)

| | A | : B |
|-----------|---------|----------|
| Capital → | 35,000 | : 56,000 |
| Profit → | 5 | : 8 |
| | ↓ × 900 | ↓ × 900 |
| | 4500 | : 7200 |

Total profit = (45,000+72,000) = Rs. 1,17,000

20. (d)

| | A | : B |
|----------|--------|----------|
| | 40,000 | : 75,000 |
| | 8 | : 15 |
| Time → | 5 | : 15 |
| Profit → | 8 | : 15 |

Note If time is same than ration of their profit will be divided in the ratio of their capital.

∴ (8+15) units = Rs. 46,000

23 units = Rs. 46,000

1 units = Rs. 2,000

15 units = 8 × 2,000 = Rs. 16,000



∴ share of A = Rs. 16,000

21. (c)

| | | | |
|-----------|--------|---|--------|
| | A | : | B |
| Capital → | 25,000 | : | 30,000 |
| | 5 | : | 6 |
| Time → | 2 | : | 1 |
| Profit → | 10 | : | 6 |
| | 5 | : | 3 |

According to the question,
 (5+3) units = Rs. 46,000
 8 units = Rs. 46,000
 1 unit = Rs. 46,000/8
 3 unit = Rs. 46,000/8 × 3 = Rs. 17,250
 Hence share of B = Rs. 17,250

22. (b) Total investment of A in 4 years
 = 40,000 + 50,000 + 60,000 + 70,000
 = Rs. 22,00,000

Total investment of B in 2 years
 = 85,000 × 2 = 1,70,000

| | | | |
|-----------|--------|---|--------|
| | A | : | B |
| Capital → | 22,000 | : | 17,000 |
| Profit → | 22 | : | 17 |

According to the question,
 (22+17) units = Rs. 1,95,000
 39 units = Rs. 1,95,000
 1 unit = Rs. 1,95,000 / 39
 22 units = Rs. 1,95,000/39 × 22 = Rs. 1,10,000

23. (c) Let the Y's capital was used to T months
 According to the question,

$$\frac{7 \times 8}{9 \times T} = \frac{8}{9}$$

T = 7 months

Hence the capital of T was used for 7 months

24. (d) Let the capital of Y was used for T months
 According to the question,

$$\frac{5 \times 8}{6 \times T} = \frac{5}{9}$$

T = 12 months

Hence the capital of Y was used for 12 months

25. (b)

| | | | |
|-----------|-------------------------|---|-------------------------|
| | 1 st partner | : | 2 nd partner |
| Capital → | 1,25,000 | : | 85,000 |
| | 25 | : | 17 |
| | 8 | | |

According to the question,
 Note : 60 % of profit should be divided equally between them

8 units = Rs. 300
 1 unit = Rs. 300/8
 42 units = Rs. 300/8 × 42
 ∴ 40 % of profit = Rs. 300/8 × 42 = Rs. 3937.50

26. (d)

| | | | |
|-----------|-------------------------|---|-------------------------|
| | 1 st Brother | : | 2 nd brother |
| Capital → | 50,000 | : | 70,000 |
| | 5 | : | 7 |
| | +2 | | |

= 57 units

According to the question,
 57 units = Rs. 8550/57
 100 units = Rs. 8550/57 × 100 = Rs. 15,000
 Alternate : X : Y
 3 : 2
 3 units = Rs. 8550
 1 unit = Rs. 8550/3 = Rs. 2850
 5 units = 2850 × 5 = Rs. 14250
 Note : 5 % of total profit is donated
 ∴ 95 % of total profit = Rs. 14250
 1 % of total profit = Rs. 14250 / 95
 100 % of total profit = Rs. 14250 / 95 × 100 = Rs. 15,000

27. (b)

Let the total profit = 100 units
 Remaining profit after donation = 100 – 100 × 5/100 = 95 units
 ∴ share of X = 95/(3+2) × 3 = 57 units
 According to the question,
 57 units = Rs. 8550
 1 unit = Rs. 8550 / 57
 100 units = Rs. 8550 / 57 × 100 = Rs. 15,000
 Alternate : X : Y
 3 : 2
 3 units = Rs. 8550
 1 unit = Rs. 8550/3 = Rs. 2850
 5 units = 2850 × 5 = Rs. 14,250
 Note : 5 % of total profit is donated

$\therefore 95\%$ of total profit = Rs. 14250
 1% of total profit = Rs. 14250 / 95
 100% of total profit = Rs. 14250 / 95 \times 100
 = Rs. 15,000

28. (a)

| | | | | | |
|-----------------------|---|---|-------|---|-------|
| | A | : | B | : | C |
| Capital \rightarrow | 5 | : | 6 | : | 8 |
| Time \rightarrow | 1 | : | $1/2$ | : | $3/2$ |
| Profit \rightarrow | 5 | : | 3 | : | 12 |

Note : (i) We know

Profit = Time \times Capital invested

(ii) In such type of questions we should assume value of time

as they can satisfy the ratio of profit.

\therefore Required ratio of time = 1 : $1/2$: $3/2$
 = 2 : 1 : 3

Alternate :-

Profit = Time \times Capital invested

Time = Profit / Capital invested

Required ratio of time = $\frac{5}{5} : \frac{3}{6} : \frac{12}{8}$

= 1 : $1/2$: $3/2$

= 2 : 1 : 3

29. (a) Total capital invested by X in a year

= 16000 \times 3 + 11000 \times 9 = Rs. 1,47,000

Total capital invested by Y in a year

= 12000 \times 3 + 17000 \times 9

= Rs. 1,89,000

Money invested by Z = 21,000 \times 6 = Rs.

1,26,000

| | | | | | |
|-----------------------|-----|---|-----|---|-----|
| | X | : | Y | : | Z |
| Capital \rightarrow | 147 | : | 189 | : | 126 |

According to the question,

(7+9+6) units = Rs. 26,400

1 unit = Rs. 26,400/22 = Rs. 1,200

Required difference = (9-6) \times 1200 = Rs. 3600

30. (a) According to the question,

| | | | | | |
|-----------------------|---|---|---|---|---|
| | X | : | Y | : | Z |
| Capital \rightarrow | 6 | : | 3 | : | 1 |

$\swarrow \times 2$ $\swarrow \times 3$

= Required ratio of capital = 6 : 3 : 1

31. (a) X : Z

$2_{\times 3}$: $1_{\times 3}$

X : Y

$3_{\times 2}$: $2_{\times 2}$

Note : X will be same in both cases, hence new required ratio

X : Y : Z

6 : 4 : 3

According to the question,

(6+4+3) units = Rs. 1,57,300

13 units = Rs. 1,57,300

1 unit = Rs. 12,100

4 units = Rs. 12,100 \times 4 = Rs. 48,400

\therefore Share of Y = Rs. 48,400

32. (a) Let the total time = 8 years

Let the total capital = 20 units

X : Y : Z

Capital \rightarrow 5 : 4 : 11

Time \rightarrow 2 : 4 : 8

Profit \rightarrow 10 : 16 : 88

5 : 8 : 44

According to the question,

(5+8+44) units = Rs. 1140

57 units = Rs. 1140

1 unit = Rs. 1140/57 = Rs. 20

Profit of X = 20 \times 5 = Rs. 100

Profit of Y = 20 \times 8 = Rs. 160

Profit of Z = 20 \times 44 = Rs. 880

33. (c) Let total profit = 24 units

Profit of A = $1/8 \times 24$ = 3 units

Profit of B = $1/3 \times 24$ = 8 units

A : B : C

Capital \rightarrow x : y : 1560

Time \rightarrow 4 : 6 : 8

Profit \rightarrow 3 : 8 : 13 [24-(8+3)]

we know,

Capital \times time = profit

Profit / time = Capital

$\therefore 13/8$ units = 1560

1 unit = Rs. 960

y = 960 \times 8 / 6

y = Rs. 1280

x = $3/4 \times 960$ = Rs. 720

Capital of A = Rs. 720

Capital of B = Rs. 1280

34. (d) Let the capital = 18 units

Let the time = 6 years

X : Y : Z

Capital \rightarrow 3 : 6 : 9

Time \rightarrow 1 : 2 : 6

Profit \rightarrow 3 : 12 : 54

1 : 4 : 18

According to the question,

(1+4+18) units = Rs. 23000

23 units = Rs. 23000



1 unit = Rs. 1000
 4 units = Rs. 1000 × 4 = Rs. 4000
 Share of Y is Rs. 4000

35. (b) A : B
 4 : 5

According to the question,
 (4+5) units = Rs. 14,130
 1 unit = Rs. 14,130/9 = Rs. 1570
 5 units = 5 × 1570 = Rs. 7850
 ∴ Hence share of B = Rs. 7850

36. (b) Total Rent = Rs. 300

| | | |
|-----------------|------|-------|
| | X | Y |
| No. of Animals | 10 | 15 |
| Time (in weeks) | 5 | 7 |
| Ratio of Rent | 5/50 | 7/105 |
| | 10 | 21 |

37. (a) Initial Ratio of investment by A and B = 2 : 3

Let their respective investments are 2x and 3x
 According to the question,
 If A added Rs. 10,000 to his investment
 Then New Ratio = 3 : 2
 $2x + 10,000 / 3x = 3/2$
 $4x + 20,000 = 9x$
 $5x = 20000$
 $x = 4000$

→ Original investment by A = 2 × 4000 = Rs. 8000

Alternative

A : B
 2×2 : 3×2
 3×3 : 2×3

Note : We know A has an additional amount.
 So amount of B would be same
 After that new ratio

+5 $\left\{ \begin{array}{l} A : B \\ 4 : 6 \\ 9 : 6 \end{array} \right.$

According to the question

5 units = Rs. 10,000
 1 unit = Rs. 2,000
 Initial capital of A = 2000 × 4 = Rs. 8000

38. (d) Let capital be Rs. 11x and Y's capital be Rs. 12x
 and let time for which Y invested capital is T₂ months

$\frac{C_1 \times T_1}{C_2 \times T_2} = \frac{P_1}{P_2}$
 $\frac{11x \times 8}{12x \times T_2} = \frac{2}{3}$

$12x \times T_2 = 3$

$T_2 = 11$ Months

Hence the time for which y invested his capital is 11 months

39. (c) Total investment by A, B and C = Rs. 47,000

Let amount invested by C = Rs. X
 then amount invested by B = Rs. (x+3000)
 and amount invested by A = Rs. (x+3000+5000)
 According to the question,
 $x + (x+3000) + (x+3000+5000) = 47000$
 $3x + 11000 = 47000$
 $3x = 36000$
 $x = Rs. 12000$

| | | | |
|-----------|--------------|--------------|-------|
| | A | B | C |
| Ration of | (x + 8000) | (x+3000) | x |
| Amount | (12000+8000) | (12000+3000) | 12000 |
| | 20,000 | (12000+3000) | 12000 |
| | 20 | 15 | 12 |

Since the time for which the amounts were invested was same for all partners the ratio of amounts will be the ratio of profits.

Share of A out of total profit = 14100/20+15+12 × 2 = Rs. 6000

40. (a) Let A's Capital = Rs. X

Let B's Capital = Rs. Y

Now, According to the question,

| | | |
|-----------------|----|-------|
| | A | B |
| Capital → | x | y |
| time (in month) | 10 | (9+1) |

9 Ratio of profit 5 : 6

we know

$\frac{10xy}{9xy} = \frac{5}{6} \implies \frac{x}{y} = \frac{3}{4}$

Hence the required ratio of capital of A and B is = 3 : 4

41. (b) Total cost of thing a car = Rs. 4,160

According to the question,

| | | | |
|-------------------|---|---|----|
| | A | B | C |
| Time of using car | 7 | 8 | 11 |

in hours
 Here the ratio of time will be the ratio of rent each person has to pay

→ ratio of rents 7 : 8 : 11 to be paid

Rent share by A = 4160 × 7/7+8+11 = Rs. 1120

42. (c) Let Total profit = 16 units



According to the question,
 Profit share of A = $3/16 \times 16$ units = 3 units
 profit share of B = $1/4 \times 16$ = 4 units
 then profit share of C = $[16 - (4+3)]$ = 9 units
 But profit of C = Rs. 243 [given]
 9 units = Rs. 243
 1 units = Rs. 27
 profit share of B = 4 units
 = 27×4 = Rs. 108

43. (c) Total profit = Rs. 880
 Since A gets 15 % of total profit for management
 \therefore Remaining profit = $880 - 880 \times 15/100$ = Rs. 748

| | | | |
|------------------|-------|-------|---|
| | A | B | |
| Amounts | 5,000 | 6,000 | |
| Ratio of Capital | 5 | 6 | : |

The remaining profit is being divided in the ratio of capital
 A's share of profit = $748/5 + 6 \times 5$ = Rs. 340
 Total profit received by A = $340 + 132$ = Rs. 472

44. (b)

| | | | |
|-----------------------|-----------|----------|----------|
| | A | B | C |
| Amounts invested | 14,000 | | |
| Time (in months) | <u>12</u> | <u>7</u> | <u>5</u> |
| | | 1,68,000 | |
| Ratio of profits | 4 | : | 3 : 2 |
| Let their profits are | 4x | : | 3x : 2x |

are
 $4x = 1,68,000$
 $x = 1,68,000/4$ = Rs. 42,000
 \Rightarrow Profit share of C = $2x = (2 \times 42,000)$ = Rs. 84,000
 \Rightarrow Capital invested by C = $84000/5$ = Rs. 16,800

45. (b) Let total capital of A, B and C = 15 units
 Let total time for investment = 12 units
 Now, According to the question,

| | | | |
|--------------------|--|--|---|
| | A | B | C |
| Capitals units | $1/3 \times 15$ units | $1/5 \times 15$ | |
| | 5 | 3 | |
| Time Ratio of time | $\left(\frac{1}{3} \times 12 \text{ units} \right)$ | $\left(\frac{1}{5} \times 12 \text{ units} \right)$ | $\left(\frac{1}{15} \times 12 \text{ units} \right)$ |
| 12 units | 4 | 6 | 2 |
| | <u>3</u> | <u>2</u> | |
| | <u>12</u> | | |

| | | |
|----|----|---|
| | 15 | 6 |
| 84 | | |
| | 5 | 2 |

28
 Ratio of profits
 Total Profits = $5 + 2 + 28$ = 35 units
 also, total profit = Rs. 1820 (Given)
 35 units = Rs. 1820
 1 unit = $\frac{1820}{35}$ = Rs. 52

Hence A's share in profit = 5 units = 52×5 = Rs. 260

46. (c) Let ratio of profit of A and B is a : b
 \therefore Ratio of profit of B and C = a : b

| | | | | |
|----------|---|----------|---|----------|
| A | : | B | : | C |
| a_{xa} | : | b_{xa} | : | b_{xb} |

Note : Value of B would be same in both cases

| | | | | |
|-------|---|------|---|-------|
| A | : | B | : | C |
| a^2 | : | ab | : | b^2 |

According to the question,

$a^2 = 6400$
 $a = 80$
 Similarly $b^2 = 10,000$

$\Rightarrow b = 100$
 Amounts received by B
 = $ab = 80 \times 100$
 = Rs. 8,000

47. (d)
- | | | | |
|---------|--------|---|-------|
| | A | : | B |
| Capital | 20,000 | : | 4,000 |
| | 5 | : | 1 |

A's salary = Rs. 1,200
 Remaining profit
 = $(1800 - 1200)$ = Rs. 600
 6 units = Rs. 600
 1 units = Rs. 100
 share of A = 100×5 = 500
 share of B = 100×5 = 500
 \therefore Total share of A = $(1200 + 500)$ = Rs. 1700

- Total share of B = Rs. 100
 According to the question
 48. (a) Let the total share

= 100 units
 Share of C = $100/4$ = 25 units
 Remaining share = $(100 - 25)$ = 75 units
 \therefore Share of A = $75/3 + 2 \times 3$ = 45 units
 Share of B = $75/3 + 2 \times 2$ = 30 units

A : B : C
 New profit sharing ratio = 45 : 30 : 25
 Required Ratio = 9 : 6 : 5

49. (b) Let the total share = 200 units



∴ Share of C = $200 \times \frac{1}{4} = 50$ units
 Remaining share = $(200 - 50) = 150$ units
 ∴ share of A = $200/3 + 2 \times 3 = 120$ units
 share of B = $200/3 + 2 \times 2 = 80$ units
 According to the question,
 C receives equal amounts from A and B
 ∴ A's remaining share = $(120 - 25) = 95$
 B's remaining share = $(80 - 25) = 55$

A : B : C
 New ratio → 95 : 55 : 50
 19 : 11 : 10

50. (d) A : B : C
 Ratio of profit → 2 : 3 : 7
 Average gain = $\frac{2+3+7}{3} = 4$ units

According to the question,
 4 units = Rs. 8000
 1 unit = Rs. 2000
 3 units = $3 \times 2000 = \text{Rs. } 6000$
 share of B = Rs. 6000

51. (a) A : B : C
 Profit → $\frac{1}{4}$: $\frac{1}{6}$: $\frac{7}{12}$
 3×9 2×9 7×9

Note : To avoid fraction in calculation multiply all the ratio by 9
 After that new Ratio of profits

A : B : C
 profit → 27 : 18 : 63
 New profit of A = $27 + 63/5 + 4 \times 4 = 55$
 New profit of B = $18 + 63/4 + 5 \times 5 = 53$
 ∴ New profit sharing ratio of A and B = 55 : 53

52. (a) A : B : C
 Capital → 1200 : 800 :
 Time → 6 : 7 : 8
 7200 : 5600 :

According to the question,
 $(9+7+6)$ units = Rs. 396
 22 units = Rs. 396
 1 unit = $\text{Rs. } 396/22 = \text{Rs. } 18$
 ∴ Share of A = $18 \times 9 = \text{Rs. } 162$

53. (b) Total capital of A invested in 1 year
 = $48,000 \times 3 + 40,000 \times 9$
 = $1,44,000 + 3,60,000 = \text{Rs. } 5,04,000$
 Total capital of B invested in 1 year
 = $60,000 \times 6 + 6,60,000 \times 6$
 = Rs. 7,56,000

A : B
 Capital → 5,04,000 : 7,56,000
 Profit → 2 : 3

× 6000 × 6000
 12,000 18,000
 Total profit = $(2+3) \times 6000 = 30,000$

54. (a) O P Q
 Capital → 6000 8400 10000
 Time → 6 7 8
 390 : 420 : 300

Profit → 13 : 14 : 10
 M's extra share on working partner
 = $7400 \times 5 / 100 = \text{Rs. } 370$
 Remaining profit = $\text{Rs. } 7400 - 370 = \text{Rs. } 7030$
 According to the question,
 $(13+14+10)$ units = Rs. 7030
 37 units = Rs. 7030
 1 units = $\text{Rs. } 7030/37$
 Profit of Q = 10 units = $\text{Rs. } 7030/37 \times 10 = \text{Rs. } 1900$

55. (a) A B C
 Capital → 15,000 12,000 8,000
 Time → 8 9 12
 1,20,000 : 1,08,000 : 96,000
 Profit → 10 : 9 : 8

According to the question,
 $(10+9+8)$ units = Rs. 10,800
 27 units = Rs. 10,840
 1 unit = Rs. 400
 Difference between A's share and C's share
 = $(10-8) \times 400 = \text{Rs. } 800$

56. (b) A : B : C
 Capital → 50,000 : 75,000 : 1,25,000
 (year) → 2 : $\frac{3}{2}$: 1
 Profit → 100 : $\frac{75 \times 3}{2}$: 125
 8 : 9 : 10

∴ Required ratio of profit = 8 : 9 : 10
 57. (b) A : B : C
 Capital → 45,000 : 80,000 : 1,20,000
 (year) Time → 2 : $\frac{3}{1}$: 1
 Profit → 90 : 120 : 120



3 : 4 : 4

Required Ratio profit = 3 : 4 : 4

58. (c)

| | A | B | C |
|-----------|-------|-------|-------|
| Capital → | 48000 | 48000 | 48000 |
| Time → | 6 | 10 | 12 |
| Profit → | 6 | 10 | 12 |
| | 3 | 5 | 6 |

Note : The capital of all the partners are equal so the profit would be divided in the ratio of their time.

According to the time,

(3+5+6) units = Rs. 5250

14 units = Rs. 375

∴ Share of A = 375 × 3 = Rs. 1125

Share of B = 375 × 6 = Rs. 2250

59. (b)

| | A | B | C |
|-----------|----------|----------|-----------|
| Capital → | 60,000 | 80,000 | 1,20,000 |
| Time → | 4 | 9 | 12 |
| Profit → | 2,40,000 | 7,20,000 | 14,40,000 |
| | 1 | 3 | 6 |

According to the question,

(1+3+6) units = Rs. 1,60,480

10 units = Rs. 1,60,480

1 unit = Rs. 16,480

Share of A = 16,048 × 1 = 16,048

Share of B = 16,048 × 3 = 48,144

Share of C = 16,048 × 6 = 96,228

60. (a) Let the amount invested by A = Rs. X

Now, According to the question ,

| | A | B | C |
|-----------|---|-------------|-------------|
| Capital → | x | (x + 15000) | (x + 35000) |

$x + x + 15000 + x + 35000 = \text{Rs. } 1,25,000$

$3x = 125000 - 50000$

$3x = 75000$

$x = \text{Rs. } 25000$

∴ Amount invested by B = Rs. 40,000

Amounts invested by C = Rs. 60,000

| | A | B | C |
|-----------|--------|--------|--------|
| Capital → | 25,000 | 40,000 | 60,000 |
| Profit → | 5 | 8 | 12 |

(5+8+12) units = Rs. 37450

25 units = Rs. 37450

1 unit = Rs. 1498

∴ Share of A = 1498 × 5 = Rs. 7490

Share of B = 1498 × 8 = Rs. 11984

Share of C = 1498 × 12 = Rs. 17976

61. (b) Capital invested by A = Rs. 42,000
Capital invested by A = Rs. 49,000
Ratio of profits of B and A = 900 : 700 = 9 : 7

we know, $C_1 \times T_1 = P_1$

$$\frac{42,000 \times 12}{49,000 \times T_2} = \frac{9}{7}$$

$$T_2 = 8 \text{ months}$$

It means B invested his capital for 8 months.

It means he joined business after (12-8 = 4) months

62. (d) Let amount invested by A = Rs. X

| | A | B |
|-----------|---|------------|
| Capital → | x | (x + 5000) |

According to the question,

Share of A in profit = $\frac{(26000 - 6000)}{2} = 10,000$

Share of B in profit = (26,000 – 10,000) = Rs. 16,000

By using formulas

$$C_1 \times T_1 = P_1$$

$$\frac{x \times 5}{(x + 5000)} = \frac{10,000}{16,000}$$

$$4x = 3x + 15,000$$

$$x = 15,000$$

Required capital of A = Rs. 15,000

Required capital of B = Rs. (15,000 + 5,000) = 20,000

63. (c) Ratio of Capital invested by A, B and C = 15 : 10 : 6

Total Capital invested by A in 1 year = $15x \times 4 + 30x \times 8 = 300x$

Total capital invested by B in 1 year = $10x \times 6 + 5x \times 6 = 90x$

Total capital invested by C in 1 year = $6x \times 12 = 72x$

Ratio of profits

| A | B | C |
|------|-----|-----|
| 300x | 90x | 72x |
| 50x | 15x | 12x |

According to the question,

$(50x + 15x + 12x) = \text{Rs. } 34,650$

$77x = \text{Rs. } 34,650$

$x = \text{Rs. } 34,650 / 77 = \text{Rs. } 450$

Profit of A = Rs. 450 × 50 = Rs. 22,500



Profit of B = Rs. 450×15 = Rs. 6,750

Profit of C = Rs. 450×12 = Rs. 5,400

64. (d) Total capital invested by A in 1 year
 = $36,000 \times 12$ = 4,32,000
 Total capital invested by B in 1 year
 = $45,000 \times 4$ ($45,000 - 20,000$) $\times 5$ + ($55,000 + 25,000$) $\times 3$
 = $1,80,000 + 1,25,000 + 2,40,000$
 = 5,45,000

| | | | | |
|--------------------------------|--------|---|--------|--|
| | A | : | B | |
| Ratio of capital \rightarrow | 432000 | : | 545000 | |
| Ratio of profit \rightarrow | 432 | : | 545 | |

According to the question,
 ($432+545$) units = Rs. 117240
 977 units = Rs. 117240
 1 unit = $117240/977$ = Rs. 120
 Difference in profit = $(545 - 432) \times 120$ = 13560
 It means B will get Rs. 13,560 more than A.

65. (b)
- | | | | | | |
|-----------------------|--------|---|--------|---|-------|
| | A | : | B | : | C |
| Capital \rightarrow | 24,000 | : | 32,000 | : | 18000 |
| | 12 | : | 16 | : | 9 |

Let the total profit = 100x
 Extra share of A = $100x \times 15/100$ = 15x
 Extra share of B = $100x \times 12/100$ = 12x
 Remaining profit = $[100x - (15x + 12x)]$ = 73x
 According to the question,
 Note : Remaining profit is distributed in the ratio of their capitals

\therefore Share of C
 = $\frac{73x}{(12+16+9)} \times 9$ = $\frac{657x}{37}$
 $\frac{657x}{37}$ = Rs. 65700

x = Rs. $\frac{65700 \times 37}{637}$

\therefore Hence required profit = 100
 = 100×3700 = Rs. 3,70,000

66. (c)
- | | | | | | |
|---------------|------------------------|---|------------------------|---|------------------------|
| | A | : | B | : | C |
| Ratio of cow | 12 | : | 16 | : | 6 |
| Time | 4×2 | : | 4×6 | : | 9×2 |
| Ratio of Rent | 96 | : | 384 | : | 108 |
| | 8 | : | 32 | : | 9 |
| | $\downarrow \times 36$ | : | $\downarrow \times 36$ | : | $\downarrow \times 36$ |
| | 288 | | 1152 | | 324 |

Total rent ($288+1152+324$) = Rs. 1764

67. (a)
- | | | | | | |
|-----------------------|-------|---|-------|---|-------|
| | A | : | B | : | C |
| Capital \rightarrow | 500 | : | 400 | : | 800 |
| Time \rightarrow | 12 | : | 10 | : | 6 |
| Profit \rightarrow | 6,000 | : | 4,000 | : | 4,800 |
| | 15 | : | 10 | : | 12 |

According to the question,
 ($15+10+12$) units = Rs. 444
 37 units = Rs. 444
 1 units = $444/37$ = Rs. 12
 Profit of A = 12×15 = Rs. 180
 Profit of B = 10×12 = Rs. 120
 Profit of C = 12×12 = Rs. 144

68. (d) B's profit share in 1 year = 12×100 = Rs. 1200

Interest of A = $\frac{10,000 \times 5 \times 1}{100}$

= Rs. 500

Interest of B = $\frac{4000 \times 5 \times 1}{100}$ = Rs. 200

Total profit of A and B = $(1200 + 500 + 200)$ = Rs. 1900

Remaining profit
 = $(4000 - 1900)$ = 2100

Note: Remaining profit will be divided in the ratio of their profit.

According to the question

| | | | |
|---------|-------|---|------|
| | A | : | B |
| Capital | 10000 | : | 4000 |
| | 5 | : | 2 |

Share of A in remaining profit = $\frac{2100}{5+2} \times 5$ = Rs. 1500

(5+2)

Share of B in remaining profit = $m \frac{2100}{(5+2)} \times 2$

Total profit of A = $500 + 1500$ = Rs. 2000

Total profit of B = $1200+600+200$ = Rs. 2100

69. (a) Total capital invested by A in 1 year

= 12×4000 = Rs. 48000

Total capital invested by B in 1 year

= $6000 \times 4 + 8000 \times 8$ = $24000 + 64000$ = Rs. 88000

Total capital invested by C in 1 year

= $8000 \times 9 + 3 \times 6000$

= $72000 + 18000$ = 90000

| | | | | | |
|--|---|---|---|---|---|
| | A | : | B | : | C |
|--|---|---|---|---|---|



Capital \rightarrow 48000 : 88000 : 90000
 24 : 44 : 45

According to the question,
 (22+44+45) units = Rs. 16950

113 units = 16950

1 units = Rs. 16950/113 = Rs. 150

Hence,

Profit of A = 150 \times 24 = Rs. 3600

Profit of B = 150 \times 44 = Rs. 6600

Profit of C = 150 \times 45 = Rs. 6750

70. (d) A : B : C = 1/4 : 1/3 : 1/6

Ratio of shares of A, B and C

A : B : C

Capita \rightarrow 3x : 4x : 2x

Total capital invested by A in 1 year

= 3x \times 4 + 5x \times 8 = 24x

Total capital invested by B in 1 year

= 4x + 5x/3 \times 6 = 32x

Total capital invested by C in 1 year

= 2x \times 12 = 24x

A : B : C

Capital \rightarrow 24x : 32x : 24x

3x : 4x : 3x

According to the question,

(3x+4x+3x) = 14000

10x = 14000

x = 1400

Hence, Profit of A = 1400 \times 3 = Rs. 4200

Profit of B = 1400 \times 4 = Rs. 5600

Profit of C = 1400 \times 3 = Rs. 4200

71. (b) A : B : C

Capital \rightarrow 25x : 16x : 24x

Total capital of A in 1 year

= 25x \times 3 + (37.5x) \times 9

= 75x + 337.5x = 412.5x

Total capital of B in 1 year

= 16x \times 12 = 192x

Total capital of C in 1 year

= 24 \times 12x = 288x

A : B : C

Capital \rightarrow 412.5x : 192x : 288x

According to the question,

(412.5x + 192x + 288x) = 35700

= 35700/892.5 = Rs. 40

Hence, Share of A = 412.5 \times 40 = Rs. 16500

72. (c) Total profit = Rs. 4000

According to the question,

20 % of B's capital = Rs. 4000

1 % of B's capital = 4000/20

B's total capital = 4000/20 \times 100 = Rs. 20,000

Let total capital required for business = 100

units

A : B : C
 Capital \rightarrow 30 : 40 : 30
 $\times 500$ $\times 500$ $\times 500$
 15,000 : 20,000 : 15,000

Hence, required capital for C = Rs. 15000

73. (a) Note : In such type of question we can assume ratio as per our need to avoid fraction.

Capital \rightarrow A : B

7_{x3} : 9_{x3}

New ratio \rightarrow A : B

21x : 27x

Total capital invested by A in 9 months

= 21x \times 3 + 7x \times 6 = 105x

Total capital invested by B in 9 months

= 27x \times 4 + 18x \times 5 = 108x + 90x = 198x

A : B

Capital \rightarrow 105x : 198x

According to the question,

(105 \times 198x) = Rs. 10201

303x = Rs. 10201

x = Rs. 10201/303

Hence, share of A

= 105 \times 10201/303 = Rs. 3535

Share of B = 198 \times 10201/303 = Rs. 6666

74. (b) Interest for A

= 42000 \times 7 \times 1/100 = Rs. 2940

Interest for B

= 48000 \times 7 \times 1/100 = Rs. 3360

Interest for C

= 32000 \times 7 \times 1/100 = Rs. 2240

Total interest of

(A+B+C) = (2940+3360+2240) = Rs. 8540

Remaining profit = Rs. (32940-8540) = Rs. 24400

A : B : C

Capital \rightarrow 42000 : 48000 : 32000

21 : 24 : 16

According to the question,

(21+24+16) units = Rs. 24400

61 units = Rs. 24400

1 units = Rs. 400

Hence, share of A in remaining profit

= 400 \times 21 = Rs. 8400

Share of B in remaining profit

= 400 \times 24 = Rs. 9600

Share of C in remaining profit

= 400 \times 16 = Rs. 6400

\therefore Total share of A



$$= 8400 + 2940 = \text{Rs. } 11340$$