Ratios and Proportions

1. In a mixture of 60 litres, the ratio of milk and water is 2:1. What is the amount of milk and water present in the mixture?

    A) 50L, 10L   B) 40L, 20L   C) 30L, 30L   D) 20L, 40L

2. In a mixture of 60 litres, the ratio of milk and water is 2:1. If this ratio is to be 1:2, then the quantity of water to be further added is:

    A) 20L   B) 30L   C) 40L   D) 60L

3. A sum of money is to be distributed among A, B, C, D in the proportion of 5 : 2 : 4 : 3. If C gets Rs.1000 more than B, what is D's share?

    A) 500   B) 1500   C) 2000   D) 1000

4. A and B together have Rs. 1210. If 4 / 15 of A's amount is equal to 2 / 5 of B's amount, how much amount does B have?

    A) 460   B) 484   C) 550   D) 664

5. A sum of Rs.312 was divided among 100 boys and girls in such a way that each boy gets Rs.3.60 and each girl Rs.2.40. The number of girls is:

    A) 35   B) 40   C) 45   D) 50

6. A sum of Rs. 36.90 is made up of 180 coins which are either 10p coins or 25p coins. The number of 10p coins is:

    A) 48   B) 54   C) 56   D) 60

7. Two numbers are respectively 20% and 50% more than a third number. The ratio of the two numbers is:

    A) 2 : 5   B) 3 : 5   C) 4 : 5   D) 5 : 4

8. The ratio between the numbers of Eclairs and Mentos in a jar is 5:6; and that of Mentos and Chocostick is 9:11. If the total number of chocolates in the jar is 110, find the number of Eclairs.

    A) 36   B) 45   C) 30   D) 44

9. If Rs. 460 is divided into three parts, proportional to $\frac{1}{2} : \frac{2}{3} : \frac{3}{4}$ then the first part is:

    A) 182   B) 190   C) 196   D) 120

10. If 0.75 : z :: 5 : 8, then z is equal to:

    A) 1.12   B) 1.20   C) 1.25   D) 1.30

11. The fourth proportional term of 5, 8, 15 is:

    A) 18   B) 24   C) 19   D) 20

12. Two numbers are in the ratio 3:5. If 9 is subtracted from each, the new numbers are in the ratio 12:23. The smaller number is:

    A) 27   B) 33   C) 49   D) 55

13. 1040 litres of milk is divided in two parts in the ratio x:21. If the first part is 200 litres, find x.

    A) 5   B) 4   C) 10   D) 8

14. In a bag, there are coins of 25p, 10p and 5p in the ratio of 1:2:3. If there is Rs.30 in total, how many 5p coins are there?

      A) 50   B) 100   C) 150   D) 200

15. Rs. 432 is divided amongst three workers A, B and C such that 8 times A's share is equal to 12 times B's share which is equal to 6 times C's share. How much did A get?

      A) 192   B) 133   C) 144   D) 128

16. An amount of money is to be divided between P, Q and R in the ratio of 3:7:12. If the difference between the shares of P and Q is Rs.2400, what will be the difference between Q and R's share?

      A) 2800   B) 3000   C) 2400   D) 3200

17. Rs.630/- is distributed among A, B and C such that on decreasing their shares by Rs.10, Rs.5 and Rs.15 respectively, the balance money would be divided among them in the ratio 3:4:5. Then, A's share is:

      A) 150   B) 200   C) 160   D) 255

18. The proportion of milk and water in 3 samples is 2:1, 3:2 and 5:3. A mixture comprising of equal quantities of all 3 samples is made. The proportion of water and milk in the mixture is:

      A) 227 : 133   B) 5 : 1   C) 99 : 61   D) 133 : 227

19. If three numbers in the ratio 3 : 2 : 5 are such that the sum of their squares is 1862, the middle number will be:

      A) 10   B) 14   C) 18   D) 22

20. The ratio of two numbers is 2:3 and the sum of their cubes is 945. The difference of numbers is?

      A) 3   B) 4   C) 5   D) 6

21. A fraction bears the same ratio to 1/27 as 3/7 does to 5/9. The fraction is?

      A) 7/45   B) 1/35   C) 45/7   D) 5/21

22. 50 liters of diesel is required to travel 500 km using an 800 cc engine. If the volume of diesel required to cover a distance varies directly as the capacity of the engine, then how many liters of diesel is required to travel 800 km using 1000 cc engine?

      A) 80   B) 90   C) 100   D) 110

23. At a casino in Mumbai, there are three tables A, B and C. The payoffs at A is 10:1, at B is 20:1 and at C is 30:1. If a man bets Rs. 200 at each table and win at two of the tables, what is the maximum and minimum difference between his earnings can be?

      A) 2500   B) 4000   C) 2000   D) 5000

24. A starts a business with a capital of Rs. 85,000. B joins in the business with Rs. 42500 after some time. For how much period does B join, if the profits at the end of the year are divided in the ratio of 3 : 1?

      A) 5 months   B) 6 months   C) 7 months   D) 8 months