**SIMPLE EQUATIONS (I)**

1. 1/3 of a number is 6 more than 1/6 of the same number. Find the number?

a) 6 b) 18 c) 36 d) 24

2. A man’s age 20 years hence would be thrice his age 20 years ago. Find his present age?

a) 20 b) 40 d) 60 d) 30

3. A man is 5 times as old as his son. In 10 years he will be 4 times as old as his son. Find the son’s present age?

a) 30 b) 40 c) 60 d) 150

4. The age of the father 10 years ago was thrice the age of his son. 10 years hence the father’s age will be twice that of his son. Find the present age of the father?

a) 60 b) 70 c) 50 d) 80

5. A tells B, “when I was half of your present age you were 1/4th of my present age.” If A’s present age is 36 what is the B’s present age?

a) 18 b) 9 c) 30 d) 27

6. A tells B, “when I was 1/6 of your present age you were 1/7th of my present age.” Find the ratio of their present ages:

a) 49:48 b) 31:29 c) 30:37 d) 8:9

7. Radha tells Seeta, “I am twice as old as you were when I was as old as you are.” Sum of their present ages is 91, find Radha’s present age?

a) 26 b) 42 c) 52 d) 36

8. In the year 2000, age of A was 1/99 of his year of birth. What will be his age in 2008?

a) 18 b) 20 c) 28 d) 30

9. Find the number of integer solutions of x+y = 18, and x-y = 7?

a) 2 b) 1 c) 0 d) oo

10. Find the value of k if the equations 4x + 5y = 32 and 12x + 15y = 2k are not inconsistent?

a) 18 b) 24 c) 36 d) 48

11. The sum of the digits of a 2 digit no. is 9. If the digits are reversed, then the no formed exceeds the original number by 27. Find the number?

a) 63 b) 72 c) 36 d) 27

12. The sum of the digits of a 2 digit no. is 13. If the no is halved, the sum of the digits of the resultant no is 11. How many such nos exist?

a) 1 b) 2 c) 3 d) 4

13. The sum of the digits of a 2 digit no is 11. If the no is halved the sum of the digits of the resultant no is 10. How many such nos exist?

a) 3 b) 4 c) 5 d) 6

14. When you reverse the digits of the no 13, the no increases by 18. How many other 2 digit nos satisfy this condition?

a) 7 b) 5 c) 6 d) 8

15. When the digits of no 41 are interchanged, it decreased by 27. How many other 2 digit nos satisfy this condition?

a) 6 b) 5 c) 7 d) 8

16. Rekha has only 10 paise and 25 paise coins with her. If she has 70 coins in all worth Rs. 10 with her, how many 25 paise coins does she have?

a) 20 b) 25 c) 40 d) 50

17. A student was asked to find 3/7th of a number and he instead multiplied it by 7/3. As a result, he got an answer which was more than the correct answer by 1680. What was the number?

a) 882 b) 273 c) 640 d) 1684

18. 4p + 6E + 5S = 43; 6P + 9E + 7S = 63, Then S =

a) 3 b) 4 c) 5 d) 6

19. 1P + 2E + 3S = 17; 3P + 2E + 1S = 19; 1P + 1E + 1S =

a) 6 b) 7 c) 8 d) 9

20. 5P + 8E + 11S = 71; 3P + 5E + 7S = 44, Then 1P + 1E + 1S =

a) 10 b) 11 c) 12 d) 13

21. 10A + 10M + 10R = 110; 4A + 3M + 1R = 30; Then 4R + 1A + 2M =

a) 25 b) 30 c) 35 d) 20

22. In a 4 digit no abcd with distinct digits b+c = a+d, b+d = 5 (a+c), a+b+c+d = 18, what is the sum of all the possible values of b?

a) 20 b) 22 c) 24 d) 25

23. There is tank. It is filed up 1/4th. On adding 1200 ltrs of water it becomes 1/3rd full. Find the capacity of the tank?

a) 12000 Lts b) 14400 Lts c) 15600 Lts d) 17800 Lts

24. In a tank 1/5th is filled up. On adding ‘x’ ltrs of water the tank is 1/4th filled. On adding another 120 ltrs the tank will be full, then ‘x’ is -

a) 6 b) 8 c) 10 d) 12

25. A takes 5 hours more than B to cover a distance of 500 Km. If instead A doubles his speed he would reach the destination 7½ hours before B. Find A’s speed?

a) 40 kmph b) 50 kmph c) 20 kmph d) 25 kmph

26. A takes 1 hour less than B to cover a distance of 750 Km. If A halved his speed, he would take 4 hours more than B to cover the same distance. Find A’s speed?

a) 75 kmph b) 80 kmph C) 100 kmph d) 150 kmph

27. Find the no of solutions of P+2Q = 80, P,QEZ+, P >Q?

a) 40 b) 30 c) 26 d) 22

28. Find the no of non negative integral solutions of x+10y+40z = 87?

a) 2 b) 5 c) 10 d) 15

29. Find the greater of the 2 numbers such that their sum is 200 and the difference of their squares is 8000?

a) 80 b) 100 c) 120 d) 140

30. Divide 80 into 2 parts such that the sum of their reciprocals is 4/75?

a) 20, 60 b) 30, 50 c) 35, 45 d) 75,5

31. The sum of 2 numbers is 5 and the product of the two is 14. What is the sum of the squares?

a) 3 b) -3 c) -13 d) None of these

32. In an examination, a student was asked to find (3/14) of a certain number. By mistake he found (3/4) of it. His answer was 150 more than the correct answer. The given number is

a) 180 b) 240 c) 280 d) 290

33. 10 years ago, the age of a man was 20 years less than 6 times his son’s age. 10 years hence his age will be 30 years less than thrice his son’s age. After how many years from now will their combined ages will be 90 years?

a) 5 b) 10 c) 15 d) 20

34. 4 years ago, a father was thrice as old as his son. 8 years hence, the father will be twice as old as his son. What is the present age of his son?

a) 16 b) 15 c) 12 d) 10

35. 5 bags and 7 books together cost Rs. 2350. While 4 books and 10 bags cost Rs. 2200, find the cost of each bag?

a) 40 b) 80 c) 110 d) 120

36. The cost of 2 dosas and 3 idlis is Rs.46. The cost of a dosa and 2 idlis is Rs.26 . Find the cost of 4 dosas and 4idlis?

a) 50 b) 60 c) 100 d) 80

37. The digits of a 2 digit number differ by 6. Find the difference between the number and the number formed by reversing its digits?

a) 48 b) 81 c) 54 d) 63

38. A and B receive an amount of Rs. 4750 in notes of denominations Rs.100 and Rs.50. If they receive a total 80 notes, how many 50 rupee notes they receive?

a) 30 b) 40 c) 65 d) 15

39. Four added to half of one-third of one- sixth of a number is equal to one-twelth of the number. What is the number?

a) 48 b) 36 c) 72 d) 54