SNS College of Technology, Coimbatore-35.
(Autonomous)
Academic Year 2022-2023(Odd)
Third Semester
19GET275 – VQAR I
(Common to all branches)

QUESTION BANK

1. Which one of the following is not a prime number?

   a) 31 b) 61
   c) 71 **d) 91**

2. $(112 \times 5^4) = ?$

   a) 67000 **b) 70000**
   c) 76500 d) 77200

3. What least number must be added to 1056, so that the sum is completely divisible by 23 ?

   a) 2 b) 3
   c) 18 d) 21

4. How many of the following numbers are divisible by 132? 264, 396, 462, 792, 968, 2178, 5184, 6336

   a) 4 b) 5
   c) 6 d) 7

5. Identify the greatest number that will divide 43, 91 and 183 so as to leave the same remainder in each case.

   a) 4 b) 7
   c) 9 d) 13

6. The H.C.F. of two numbers is 23 and the other two factors of their L.C.M. are 13 and 14. Identify the larger of the two numbers.

   a) 276 b) 299
   c) 322 d) 345

7. Six bells commence tolling together and toll at intervals of 2, 4, 6, 8 10 and 12 seconds respectively. In 30 minutes, how many times do they toll together ?

   a) 4 b) 10
   c) 15 **d) 16**

8. The greatest number of four digits which is divisible by 15, 25, 40 and 75 is:

   a) 9000 b) 9400
   c) 9600 d) 9800

9. Identify the cube root of .000216

a) -6 **b) .06**

c) 77 d) 87

10. What should come in place of both x in the equation $\frac{x}{\text{Sqrt}(128)} = \frac{\text{Sqrt}(162)}{x}$.

a) 12 b) 14

c) 144 d) 196

11. The least perfect square, which is divisible by each of 21, 36 and 66 is:

a) 213444 b) 214344

c) 214434 d) 231444

12. What decimal of an hour is a second?

a) .0025 b) .0256

c) .00027 d) .000126

13. A batsman scored 110 runs which included 3 boundaries and 8 sixes. Identify the percent of his total score did he make by running between the wickets?

a) 45% **b) 45(5/11) %**

c) 54(6/11)% d) 55 %

14. Two students appeared at an examination. One of them secured 9 marks more than the other and his marks was 56% of the sum of their marks. The marks obtained by them are:

a) 39, 30 b) 41, 32

c) 42, 33 d) 43, 34

15. A fruit seller had some apples. He sells 40% apples and still has 420 apples. Originally, he had:

a) 588 apples b) 600 apples

c) 672 apples **d) 700 apples**

16. What percentage of numbers from 1 to 70 have 1 or 9 in the unit's digit?

a) 1 b) 14

c) 20 d) 21

17. If A = x% of y and B = y% of x, then Infer which of the following is true?

a) A is smaller than B. b) A is greater than B

c) Relationship between A and B cannot be determined. **d) None of these**

18. Alfred buys an old scooter for Rs. 4700 and spends Rs. 800 on its repairs. If he sells the scooter for Rs. 5800, his gain percent is:

a) 4(4/7)% **b) 5(5/11) %**

c) 10% d) 12 %

19. The cost price of 20 articles is the same as the selling price of x articles. If the profit is 25%, then Identify the value of x is:

a) 15 **b) 16**

c) 18 d) 25

20. If selling price is doubled, the profit triples. Identify the profit percent.

a) 66(2/3) **b) 100**

c) 105(1/3) d) 120

21. In a certain store, the profit is 320% of the cost. If the cost increases by 25% but the selling price remains constant, approximately what percentage of the selling price is the profit?

a) 30% **b) 70%**

c) 100% d) 250%

22. A vendor bought toffees at 6 for a rupee. How many for a rupee must he sell to gain 20%?

a) 3 b) 4

c) 5 d) 6

23. A sum of money at simple interest amounts to Rs. 815 in 3 years and to Rs. 854 in 4 years. The sum is:

a) Rs.650 b)Rs.690

c) Rs. 698 d) Rs. 700

24. Mr. Thomas invested an amount of Rs. 13,900 divided in two different schemes A and B at the simple interest rate of 14% p.a. and 11% p.a. respectively. If the total amount of simple interest earned in 2 years be Rs. 3508, what was the amount invested in Scheme B?

a) Rs. 6400 b) Rs. 6500

c) Rs. 7200 d) Rs. 7500

25. A sum fetched a total simple interest of Rs. 4016.25 at the rate of 9 p.c.p.a. in 5 years. What is the sum?

a) Rs. 4462.50 b) Rs. 8032.50

c) Rs. 8900 **d) Rs. 8925**

26. How much time will it take for an amount of Rs. 450 to yield Rs. 81 as interest at 4.5% per annum of simple interest?

a) 3.5 years **b) 4 years**

c) 4.5 years d) 5 years

27. A bank offers 5% compound interest calculated on half-yearly basis. A customer deposits Rs. 1600 each on 1st January and 1st July of a year. At the end of the year, the amount he would have gained by way of interest is:

a) Rs. 120 **b) Rs. 121**

c) Rs. 122 d) Rs. 123

28. A and B together have Rs. 1210. If $\frac{4}{15}$ of A's amount is equal to $\frac{2}{5}$ of B's amount, Identify the amount does B have?

a) Rs. 460 **b) Rs. 484**

c) Rs. 550 d) Rs. 664

29. 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) 6:7

30. 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 D, what is B's share?

a) Rs. 500 b) Rs. 1500

c) Rs. 2000 d) Rs. 3000

31. Seats for Mathematics, Physics and Biology in a school are in the ratio 5 : 7 : 8. There is a proposal to increase these seats by 40%, 50% and 75% respectively. What will be the ratio of increased seats?

a) 2:3:4 b) 6:7:8

c) 6:8:9 d) 7:8:9

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

a) 20 litres b) 30 litres

c) 40 litres **d) 60 litres**

33. A vessel is filled with liquid, 3 parts of which are water and 5 parts syrup. How much of the mixture must be drawn off and replaced with water so that the mixture may be half water and half syrup?

a) 1/3 b) 1/4

c) 1/5 d) 1/7

34. Tea worth Rs. 126 per kg and Rs. 135 per kg are mixed with a third variety in the ratio 1 : 1 : 2. If the mixture is worth Rs. 153 per kg, the price of the third variety per kg will be:

a) Rs. 169.50 b) Rs. 170

c) Rs. 175.50 d) Rs. 180

35. A can contains a mixture of two liquids A and B is the ratio 7 : 5. When 9 litres of mixture are drawn off and the can is filled with B, the ratio of A and B becomes 7: 9. How many litres of liquid A was contained by the can initially?

a) 10 b) 20

c) 21 d) 25

36. A milk vendor has 2 cans of milk. The first contains 25% water and the rest milk. The second contains 50% water. How much milk should he mix from each of the containers so as to get 12 litres of milk such that the ratio of water to milk is 3 : 5?

a) 81 min b) 108 min

c) 144 min d) 192 min

37. In what ratio must a grocer mix two varieties of pulses costing Rs. 15 and Rs. 20 per kg respectively so as to get a mixture worth Rs. 16.50 kg?

a) 3 : 7 b) 5 : 7

c) 7 : 3 d) 7 : 5

38. The sum of ages of 5 children born at the intervals of 3 years each is 50 years. What is the age of the youngest child?

a) 4 years b) 8 years

c) 10 years d) 15 years

39. A father said to his son, "I was as old as you are at the present at the time of your birth". If the father's age is 38 years now, the son's age five years back was:

a) 14 years b) 19 years

c) 33 years d) 38 years

40. A is two years older than B who is twice as old as C. If the total of the ages of A, B and C be 27, then how old is B?

a) 7 b) 8

c) 9 **d) 10**

41. Present ages of Sameer and Anand are in the ratio of 5 : 4 respectively. Three years hence, the ratio of their ages will become 11 : 9 respectively. What is Anand's present age in years?

a) 24 b) 27

c) 40 d) Cannot be determined

42. A man is 24 years older than his son. In two years, his age will be twice the age of his son. The present age of his son is:

a) 14 years b) 18 years

c) 20 years **d) 22 years**

43. Six years ago, the ratio of the ages of Kunal and Sagar was 6 : 5. Four years hence, the ratio of their ages will be 11 : 10. What is Sagar's age at present?

a) 16 years b) 18 years

c) 20 years d) Cannot be determined

44. The sum of the present ages of a father and his son is 60 years. Six years ago, father's age was five times the age of the son. After 6 years, son's age will be:

a) 12 years b) 14 years

c) 18 years **d) 20 years**

45. At present, the ratio between the ages of Arun and Deepak is 4 : 3. After 6 years, Arun's age will be 26 years. What is the age of Deepak at present?

a) 12 years **b) 15 years**

c) 19 and half d) 21 years

46. Find the L.C.M of 2.5, 0.5 and 0.175.

a) 17.5 b) 7.5

c) 2.5 d) 5

47. The L.C.M of 4.5, 0.009 and 0.18 = ?

a) 0.225 b) 2.25

c) 45 **d) 4.5**

48. The L.C.M of two numbers is 1890 and their H.C.F is 30. If one of them is 270, the other will be

a) 210 b) 220

c) 320 d) 310

49. The H.C.F of two numbers is 11, and their L.C.M is 616. If one of the numbers is 88, find the other.

a) 87 b) 88

c) 77 d) 97

50. The HCF and LCM of two numbers are 12 and 144 respectively. If one of the numbers is 36, the other number is

a) 432 b) 72

c) 4 **d) 48**

51. The largest 4 digit number exactly divisible by 88 is

a) 9944 b) 9768

c) 9988 d) 8888

52. Which of the following is a prime number?

a) 33 b) 81

c) 93 **d) 97**

53. Three number are in the ratio of 3 : 4 : 5 and their L.C.M. is 2400. Their H.C.F. is

a) 40 b) 80

c) 120 d) 200

54. The H.C.F. of 1.08, 0.36 and 0.9 is

a) 0.03 b) 0.9

c) 0.18 d) 0.108

55. The least multiple of 7, which leaves a remainder of 4, when divided by 6, 9, 15 and 18 is

a) 74 b) 94

c) 184 **d) 364**

56. What is the smallest number which when increased by 6 is divisible by 36, 63 and 108?

a) 750 b) 752

c) 754 d) 756