CLASS - VIII

1) Which of the following set of numbers is closed under division.
   1) N   2) w   3) R   4) none

2) Which of the following is negative of -2.

   1) -2   2) ± 2 3) $\dfrac{1}{2}$ 4) 2

3) The reciprocal of a +ve number is
   1) negative   2) positive   3) $\pm$ 4) none

4) The rational number that is equal to its negative.
   1) 1   2) 0   3) 2/0   4) none

5) Which of the following numbers are equal to their own reciprocals.
   1) 1   2) -1   3) 0   4) a,b are true

6) Which of the following rational number does not lie between 3/5 and 3/4.

   1) $\dfrac{97}{160}$ 2) $\dfrac{98}{160}$ 3) $\dfrac{99}{160}$ 4) $\dfrac{96}{120}$

7) Which of the following is a linear expression.

   1) $2x$ 2) x^2 3) $x + x^2$ 4) $x^2 - x$

8) The difference between two numbers is 66 and their ratio is 2 : 5. Then the two numbers are
   1) 44,110   2) 11,77   3) 22,88   4) 33,99

9) A grand father is ten times older than his grand daughter. He is also 54 years older than her. Their present ages are _____,_____
   1) 6,60   2) 8,62   3) 10,64   4) none

10) If 0.25(4x-3)=0.05(10x-9) then x = __
   1) 2.4   2) 2.0   3) 2.6   4) 0.6

11) Present ages of Anu and Raj are in the ratio 4 : 5. Eight years from now the ratio of their ages will be 5:6. Their present ages are
   1) 32,40   2) 28,35   3) 20,25   4) 24,30

12) $\dfrac{x+1}{2x+3} = \dfrac{3}{8}$ *then*

1) x=2   2) x=$\dfrac{1}{2}$ 3) x=-2   4) x=$-\dfrac{1}{2}$

13) If $\sqrt{x-3} = y$, $\sqrt{y-4} = z$ *and* $\sqrt{z-5} = 2$ *then* $x =$ _____
    1) 6129   2) 6565   3) 7103   4) 7228

14) The sum of the measures of the external angles of any polygon is ___ degrees.
    1) 180   2) 360   3) 270   4) 90

15) The measure of each exterior angle of a regular polygon of 15 sides is __ degrees.
    1) 25   2) 24   3) 27   4) 30

16) Which of the following is a difference between the upperclass limit and
    lower class limit of the class interval
    1) data   2) size   3) raw data   4) none

17) Which of the following shows the height of the bar in the histogram
    1) upperlimit   2) lowerlimit   3) frequency   4) none

18) In a histogram the width of bars are __
    1) equal   2) unequal   3) can't say   4) none

19) A circle graph shows the relationship between a whole and its_____.
    1) angles   2) sectors   3) parts   4) none

20) $1^3 + 2^3 + 3^3 + ... + 9^3 =$ _____
    1) 43^2 2) 44^2 3) 45^2 4) 46^2

21) If a = digit at the hundreds place
        b = digit at the tens place
        c = digit at the one's place,
        then which of the following is always divisible by 7 ?

    1) 2a+3b+c   2) 3a+2b+c   3) 2a-3b+c   4) 3a-2b+c

22) Divide the sum of $\dfrac{-13}{5}$ and $\dfrac{12}{7}$ by the product of $\dfrac{-13}{7}$ and $\dfrac{-1}{2}$, result is____

    1) $\dfrac{-62}{65}$ 2) $\dfrac{-65}{62}$ 3) $\dfrac{62}{65}$ 4) $\dfrac{+65}{62}$

23) If 2791A is divisible by 9, then the missing digit in place of A is __
    1) 8   2) 7   3) 6   4) 5

24) Which of the following is not a rational number
    1) 1   2) $1.\bar{3}$ 3) $\sqrt{9}$ 4) $\sqrt{5}$

25) Rama said "Multiplying my number by 5 and adding 8 to it gives the same answer as subtracting my number from 20". My number is ___
    1) 1   2) 2   3) 3   4) 4

26) Exterior angle of an equilateral triangle is
    1) 60   2) 100   3) 120   4) 80

27) A quadrilateral with exactly two pairs of equal consecutive sides is called
    1) Parallelogram   2) Trapezium
    3) Rectangle   4) Kite

28) Which of the following statement is true
    1) All rectangles are squares.
    2) All Kites are rhombuses.
    3) All squares are not parallelograms.
    4) All squares are rhombuses and also rectangles.

29) How many measurements are sufficient to draw a unique quadrilateral.
    1) 4   2) 5   3) 3   4) 6

30) Number of diagonals in a regular n-sided polygon is _____.

   1) $\dfrac{n(n+1)}{2}$ 2) $\dfrac{n(n+3)}{2}$ 3) $\dfrac{n(n-3)}{2}$ 4) none

31) Two numbers are said to be in the ratio 3 : 5. If 9 be subtracted from each, they are in the ratio of 12 : 23. The numbers are
    1) 21,35   2) 33,55   3) 27,45   4) none

32) The sum of two numbers is 14 and their difference is 10. The product of the two numbers is_____.
   　1) 24　　　　　　2) 34　　　　　　3) 44　　　　　　4) 64

33) If $x + \dfrac{1}{y} = 1$ and $y + \dfrac{1}{z} = 1$ then $z + \dfrac{1}{x} =$ _____
   　1) -1　　　　　　2) 1　　　　　　3) 2　　　　　　4) -2

34) The value of $a^3 + b^3 + c^3 - 3abc$ when $a + b + c = 9$ and $a^2 + b^2 + c^2 = 29$ is _____.
   　1) 9　　　　　　2) 3　　　　　　3) 27　　　　　　4) 81

35) If $x + y = 2z$ then the value of $\dfrac{x}{x-z} + \dfrac{z}{y-z} =$ ___
   　1) -1　　　　　　2) 1　　　　　　3) 0　　　　　　4) None

36) If $x < 10$ then $|x - 10| =$ ___
   　1) x-10　　　　　2) 10-x　　　　　3) x+10　　　　　4) -x+1

37) Which of the following graph is used to display two sets of data on the same graph (one graph paper)
   　1) Bar graph　　2) Pie chart　　　3) Double bargraph　4) None

38) If the number of observations=n is odd number then the median is ___ term
   　1) $\left(\dfrac{n+1}{2}\right)^{th}$　　2) $\left(\dfrac{n}{2}+1\right)^{th}$　　3) n^{th}　　　4) $(n+1)^{th}$

39) The perpendicular line segment from any vertex of a triangle to it's opposite side is called __
   　1) Median　　　2) Altitude　　　3) Bisector　　　4) None

40) D.R.Kaprekar was also known as __
   　1) Anand Ganith　　　　　　2) Ganith Anand
   　3) Ganitha Sri　　　　　　4) Sri Ganith

41) A pair of adjacent angles whose sum is _____ are called linear pair of angles.
   　1) 90　　　　　2) 180　　　　　3) 270　　　　　4) 360

42) The conjugate angle of 60^0 is ___
    1) 30   2) 120   3) 300   4) 340

43) Choose the correct order of signs from the given alternative signs
    34 □ 2 □ 17 □ 34
    1) $-, -, \times$ 2) $+, +, +$ 3) $-, \div, \times$ 4) $\div, +, =$

44) $\{6 \ of \ 145 \div (3+2)\} \div 2 - 4 \ of \ 20 = $ _____
    1) 6   2) 7   3) 8   4) 9

45) Next number in the series   3, 5, 8, 13, 21, _____
    1) 27   2) 34   3) 31   4) 35

46) $4.347 \div 0.09 = $ _____
    1) 48.3   2) 4.83   3) 0.483   4) 483

47) Next number in the series   12, 60, 30, 150, 75, _____
    1) 325   2) 150   3) 375   4) 300

48) Two numbers are in the ratio 2 : 3 and their difference is 5 then the largest number is ____
    1) 10   2) 15   3) 20   4) 30

49) Three-fourth of a number is more than one-fourth of the same number by 2. The number is _____.
    1) 2   2) 4   3) 6   4) 8

50) A man travels $\dfrac{4}{5}$ of his journey by train, $\dfrac{1}{7}$ by bus and the remaining 16kms by auto. Total length of his journey _____km
    1) 280   2) 252   3) 260   4) 262

51) If two angles have common vertex, common arm and lie on either side of the common arm, then they are called_____
    1) Adjacent angles   2) Linear pair
    3) Complementary angles   4) Supplementary angles

Observe the adjacent pie chart it is about the time spent by a child during a day. Now answer the questions 52 to 54.
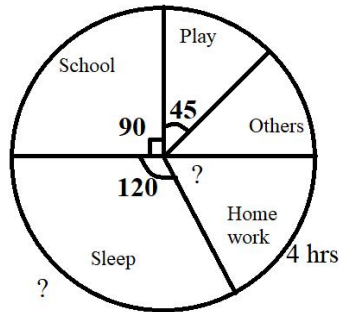
52) The angle of the sector represents home work is _____ degrees.
   1) 90   2) 45   3) 100   4) 60

53) The number of hours represent sleep of the child_____ hrs
   1) 6   2) 8   3) 5   4) 4

54) The angle of the sector represents child's other work is _____degrees.
   1) 60   2) 90   3) 45   4) 120

55) How many methods are used for numeration in the world
   1) 1   2) 2   3) 3   4) 4

56) Which of the following is the nearest number to 1234 which is divisible by 11
   1) 1221   2) 1232   3) 1243   4) 1233

57) The HCF of two numbers is 6 and their LCM is 36. If one of the numbers is 12, then the other number is _____
   1) 4   2) 12   3) 18   4) 24

58) A moter bike runs $52\dfrac{1}{2}$ kms using 1 litre of petrol. Distance covered by it

   for $2\dfrac{3}{4}$ litres of petrol _____km

   1) $\dfrac{1155}{2}$ 2) $\dfrac{1155}{4}$ 3) $144\dfrac{3}{8}$ 4) $144\dfrac{1}{8}$

59) A closed figure, formed with a definite number of straight line segments is called a _____
   1) Polynomial   2) Hexagon   3) Octagon   4) Polygon

60) Fractions with different denominators are called _____fractions
   1) Like   2) Unlike   3) Mixed   4) Proper