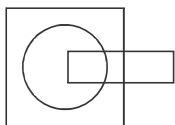# 10th Class Sample

1.   Doctors, Fathers, Gents are shown in the wein diagram. then doctors indicates

   (A) Circle   (B) Square   (C) Rectangle   (D) None

2. The Example of a tautology is

   (A) $p \to (p \vee q)$ (B)   (C)   (D)

3. The quantifier implied in the statement "No one child is not lazy"

   (A)   (B)   (C)   (D)

4.   , then $f(2.1919.......) = $ _____

   (A)   (B) 0   (C) -1   (D) 1

5.   In the given figure, value ot x is _____

   (A) 45^0 (B) 34^0 (C) 64^0 (D) 109^0

6. A-(BUB¹)=

   (A) B   (B) ϕ (C)   (D) A

7. Which has only subset

   (A) { }   (B) {0, 1}   (C) {1}   (D) {0}

8. The Counter example of   to be False

   (A)   (B) 2   (C) 3   (D) 5

9.   and   then

   (A) 40   (B)50   (C) 60   (D) 30

10.   then the no. of Relations defined on
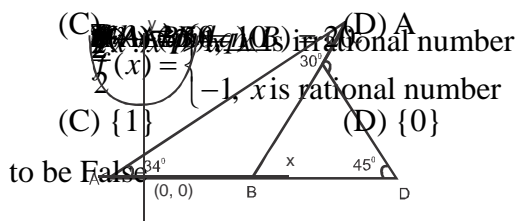
   (A)   (B)   (C)   (D)

11. If the world population is increasing by one person per every second then the increase of population in 5 days will be

   (A) 4 lakhs, 32 thousand   (B) 86 thousand, 400

   (C) 3 lakhs, 59 thousand   (D) 1 lakh, 34 thousand

12.   Zero value of this function

   (A) 0   (B) No zero value   (C) Not a function   (D) (2-2)

13. The domain of $y = \sqrt{\log \dfrac{1}{|\sin x|}}$ is

   (A) $R - (-\pi, \pi)$ (B)   (C)   (D)

14.   then number of one-one functions from A to B is

   (A)   (B)   (C)   (D) None

15.   then $f^{-1}(x) = \underline{\quad}$

   (A) $\dfrac{7x-2}{3}$ (B)   (C)   (D)

16. The square root of

   (A)   (B)   (C)   (D)

17. The sum of a number and its inverse number is   then the numbers are

   (A)   (B)   (C)   (D)

18. Expansion of   the term of independent of x

   (A)   (B)   (C)   (D)

19. Expansion of $(x+3y)^{10}$ the no.of center terms

   (A) 1   (B) 2   (C) 3   (D) None

20. 'n' is any odd number then   is divisible by_____

   (A) 48   (B) 36   (C) 100   (D)32

21. Expansion of   the 12th term is_____

   (A)   (B)   (C)   (D)

22. Importance ot Ramanujan number *(1729)* is

   (A)   (B) $1729 = 10^3 + 9^3$ (C) Both   (D) None

23.   is completely divided by   . then the value of p is.........

   (A) 6   (B) -6   (C) 8   (D) -8

24.   *AB=4* units, *AC=2.5* units, *BC=3* units, *QR=5.2* units then *QP=...*

   (A) 3.25   (B) 4.35   (C) 6.89   (D) 8.0

25.   In the given figure, $\angle BAC = 30^0$, then $\angle OBC = \underline{\quad}$

   (A)   (B)   (C)   (D)

26. Which are the sides of Right angled triangle

   (A) 8,15,17   (B) 6,8,12   (C) 5,8,11   (D) 3,4,6

27. In the given figure, the radius of the outer circle is 'a' then the radious of the inner circle is

(A) $(\sqrt{2}-1)a$ (B) $\sqrt{2}a$ (C)   (D)

28. The ratio of the areas of   and   is 4:9 then the ratio of the corresponding sides of   and   is

(A) 2:3   (B) 16:81   (C) 3:2   (D) 9:4

29. If   lie on a line, then $x=-(D)$

(A) -5   (B) 2   (C) 4   (D) 6

30. The slope ot the straight line   is_____

(A)   (B)   (C)   (D)

31. The point *(0,0)* lies on the line_____
(A) *y=5*   (B) *x=4*   (C) *y=x*   (D) *y=2x+3*

32. The image (reflection) of the point   with respect to *y-axis* is

(A)   (B)

(C)   (D)

33. If   is parallel to *x* axis then $k=$____
(A) 1   (B) 2   (C)   (D) 3

34. The area of the triangle formed by (0,0); (0,4); (3,0) is____

(A) 1   (B) -2   (C)   (D) 1

35. The angle between the lines *x-7y-22=0; 7x+y-54=0* is
(A) 45^0 (B) 60^0 (C) 90^0 (D) 120^0

36. The median of the data   is

(A)   (B)   (C)   (D)

37. The mean of data is 9. If each observation is multiplied by 3 and the 1 added to each result, find the mean of the new observations so obtained
(A) 27   (B) 29   (C) 28   (D) 26

38. *A.M.=43*, Median=*43.4,* then Mode=
(A) 44.2   (B) 43.4   (C) 44.4   (D) 42.4

39. For what value of *'a'* will *7.5* be the median of *4, 6, a, 9, 10, 19*
(A) 6   (B) 10   (C) 7   (D) 8

40. Mean of the following data *8, -2, 9, 6, 13, 17, 12*
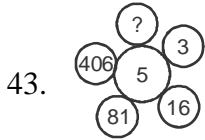(A) 10   (B) 8   (C) 7   (D) 9

41. How many right angled triangles are ther is the given figure

(A) 12   (B) 15   (C) 9   (D) 11

42. 2, 10, 30, 68, 130, 222, _____
(A) 350   (B) 250   (C) 450   (D) 280

43.

(A) 2031   (B) 731   (C) 1625   (D) 1

44. Ram travels a certain distance at *3km/hr* and reaches *15min.* late. If he travels at *4 km/hr*, he reached *15min* earlier the distance he has to travel is
(A) 4.5km   (B) 6 km   (C)7.2 km   (D) 12 km

45. '+' stands for division, ÷ stands for multiplication, 'X' stands for subtraction and '-' stands for addition which one of the following equations is correct!
(A)   (B)

(C)   (D)

46. In a certain code MUNICIPALITY is written as INMUAPCIYTLI. How is JUDICIAL written in that code
(A) UJDILACI   (B) IDUJLACI   (C) IDJULAIC   (D) IDJULACI

47.

$18 * 6 * 7 * 5 * 2 = 20$

18		20
A6	C2	?
T5	R4	P15

(A) E10   (B) E 12   (C) S10   (D) S12

48. In a family, a couple has a son and a daughter the age ot the father is three times that of his daughter and the age of son is half of his mother the wife is 9 yrs younger to her husband and the brother is seven years older than his sister. What is the age of the mother
(A) 40yrs   (B) 45yrs   (C)50yrs   (D) 60yrs

49. what is the water image of FAMILY
(A) ＦＡＭＩＬＹ   (B) ＥＡＭＩＴＹ   (C) ＦＡＭＩＴＹ   (D) ＥＡＭＩＴＹ

50. What is the mirror image of T3S4P5H6
(A) 6H5P4S3T   (B) H6P5S4T3   (C) 9H5P4S3T   (D) 9H5P4S3T