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8TH ONE- MARK QUESTION BANK

Fill in the blanks:

1. $\frac{-19}{5}$ lies between the integers _____ and _____.
2. The decimal form of the rational number $\frac{15}{-4}$ is _____.
3. The rational numbers $\frac{-8}{3}$ and $\frac{8}{3}$ are equidistant from _____.
4. The next rational number in the sequence $\frac{-15}{24}, \frac{20}{-32}, \frac{-25}{40}$ is _____.
5. The standard form of $\frac{58}{-78}$ is _____.
6. The value $\frac{-5}{12} + \frac{7}{15} =$ _
7. The value of $\left(\frac{-3}{6}\right) \times \left(\frac{18}{-9}\right)$ is ____.
8. The rational number ____ does not have a reciprocal.
9. The multiplicative inverse of -1 is ____.
10. The value of $\left(\frac{-15}{23}\right) \div \left(\frac{30}{-46}\right)$ is____.
11. If a number has 5 or 6 digits in it, then its square root will have ____ digits.
12. The number of non-square numbers between 24^2 and 25^2 ____.
13. The ones digit in the square of 77 is _____
14. The value $\sqrt{180}$ lies between integers ____ and _____.
15. The number of perfect square numbers between 300 and 500 is _____.
16. The cube root of 0.000004913 is ___.
17. The cube root of 540×50 is ____.
18. The ones digit in the cube of 73 is ___.
19. The maximum number of digits in the cube of a two digit number is___.

20. The smallest number to be a added to 3333 to make it a perfect cube is ___.
21. $\left(-\frac{1}{3}\right)^{-5} =$
22. $4^{-3} \times 5^{-3} =$
23. $(-1)^{even\ integer}$ is _____.
24. $(-2)^{-7} =$
25. For $a \neq 0, a^0$ is ____.
26. A part of circumference of a circle is called as ___.
27. The radius of a circle of diameter $24cm$ is ___.
28. A line segment which joins any two points on a circle is a ___.
29. The longest chord of a circle is ____.
30. The ratio between the circumference and diameter of any circle is ___.
31. If a net of a 3-D shape has six plane squares , then it is called ___.
32. The cross section of a solid cylinder is ___.
33. A cube has ___ faces.
34. The three dimensions of a cuboid are ____, ___ and ___.
35. The meeting point of more than two edges in a polyhedron is called as ___.
36. The linear equation in one variable has ___ solution.
37. The value of x in the equation $x + 5 = 12$ is ____
38. The value of y in the equation $y - 9 = (-5) + 7$ is ___
39. The value of m in the equation $8m = 56$ is ____.
40. The value of p in the equation $\frac{2p}{3} = 10$ is ____.
41. In an equation $a + b = 23$ .The value of 'a' is 14 then the value of 'b' is ___.
42. If the angles of a triangle are in the ratio 2:3:4 then the difference between the greatest and the smallest angle is ___.
43. One-sixth of a number when subtracted from the number itself gives 25. The number is ___.
44. The solution of the equation $ax + b = 0$ is ___.
45. If a and b are positive integers then the solution of the equation $ax = b$ has to be always ___.
46. _____ coordinates are the same for a line parallel to y-axis .

47. X-axis and Y-axis intersect at____.
48. The co-ordinates of the point in third quadrant are always ____.
49. (0,-5) point lies on ___ axis.
50. The X-coordinate is always ___ on the y-axis.
51. $y = px$ where $p \epsilon z$ always passes through the ___.
52. The intersecting point of the line $x = 4$ and $y = -4$ is ____.
53. In 30% of x is 150, then x is ___.
54. 2 minutes is ___% to an hour.
55. If x% of $x = 25$, then $x =$___.
56. In a school of 1400 students ,there are 420 girls . The percentage of boys in the school is ___.
57. 0.5252 is ___%
58. The total bill amount of a shirt costing Rs.575 and a T-shirt costing Rs.325 with GST of 5% is ___.
59. A mixer grinder marked at Rs.4500 is sold for Rs.4140 after discount . The rate of discount is__.
60. An article is sold for Rs.555 at a loss of $7\frac{1}{2}\%$. The cost of the article is ____.
61. Loss or gain percentage is always calculated on the ___.
62. A mobile phone is sold for ₹ 8400 at a gain of 20%. The cost price of the mobile phone is ___.
63. The compound interest on ₹5000 at 12% p.a for 2 years , compounded annually is ___.
64. The compound interest on ₹8000 at 10% p.a for 1 years , compounded half yearly is ___.
65. If the compound interest is calculated quarterly , the amount is found using the formula___.
66. The annual rate of growth in population of a town is 10 %. If its present population is 26620, then the Population 3 years ago was____.
67. The difference between the C.I and S.I for 2 years for a principal of ₹5000 at the rate of interest 8% p.a is ___.
68. A alone can do a work in 10days and B alone in 15 days.They undertook the work for ₹200000.The amount that A will get is ___.

69. A can finish a job in 3 days whereas B finishes it in 6 days. The time taken to complete the job working together is ___ days.

70. If 5 persons can do 5 jobs in 5 days ,then 50 persons can do 50 jobs in ___ days.

71. A can do a work in 24 days. If A and B together can finish the work in 6days , then B alone can finish the work in ___ days.

72. A alone can do a piece of work in 35 days .If B is 40% more efficient than A, then B will finish the work in ___ days.

73. Corresponding sides of similar triangles are___.

74. Similar triangle have the same ___ but not necessarily the same size.

75. The symbol $\equiv$ is used to represent ____ triangles .

76. The symbol $\sim$ is used to represent ____ triangles.

77. In any triangle ___ sides are opposite to equal angles.

78. The centroid of a triangle divides each medians in the ratio___.

79. The medians of a triangle cross each other at___.

80. If the sides of a triangle are in the ratio 5:12:13 then it is___.

81. If in a $\Delta PQR, PR^2 = PQ^2 + QR^2$, then the right angle of ΔPQR is at the vertex ____.

82. If $'l'$ and $'m'$ are the legs and $'n'$ is the hypotenuse of a right angled triangle then, l^2=____.

83. The range of the data 200,15,20,103,3,196 is____.

84. The upper limit of the class interval (25-35) is ___.

85. If a class size is 10 and range is 80 then the number of classes are___.

86. Pie chart is a __ graph.

87. Data has already been collected by some other person is ___ data.

88. Histogram is a graphical representation of ___ data.

89. A graph that displays data that changes continuously over the periods of time is ____.

90. The total area of the histogram is ___ to the total frequency of the given data.

SAY TRUE OR FALSE

1. Media and business people use pie charts.

2. Inclusive series is a continuous series.

3. Comparison of parts of a whole may be done by a pie chart.

4. A pie diagram is a circle broken down into component sectors.

5. In a right angled triangle, the hypotenuse is the greatest side.

6. The in centre is equidistant from all the vertices of a triangle.

7. The centroid, orthocentre, and in centre of a triangle are collinear.

8. 8, 15, 17 is a Pythagorean triplet

9. In any triangle the centroid and the in centre are located inside the triangle.

10. Depreciation value is calculated by the formula ,$p\left(1-\frac{r}{100}\right)^n$

11. The compound interest on Rs.16000 for 9 months at 20% p.a, compounded quarterly is Rs.2522.

12. The time taken for Rs.1000 to become Rs.1331 at 20% p.a, compounded annually is 3 years.

13. The present value of a machine is Rs.16800. It depreciates at 25% p.a. Its worth after 2 years is Rs.9450.

14. Depreciation value is calculated by the formula , $p\left(1-\frac{r}{100}\right)^n$.

15. The points (1,1) (2,2) (3,3) lie on a same straight line.

16. $y=-9x$ not passes through the origin

17. $(-10,20)$ lies in the second quadrant.

18. $(-9, 0)$ lies on the x-axis.

19. The coordinates of the origin are (1,1).

20. "Sum of a number and two times that number is 48" can be written as $y+2y = 48$

21. $5(3x+2) = 3(5x-7)$ is a linear equation in one variable.

22. $x = 25$ is the solution of one third of a number is less than 10 the original number.

23. The shifting of a number from one side of an equation to other is called transposition.

24. Linear equation in one variable has only one variable with power 2.

25. $8x^3y \div 4x^2 = 2xy$

26. $7ab^3 \div 14ab = 2b^2$

27. The standard form of 2×10^{-4} is 0.0002.

28. The scientific form of 123.456 is 1.23456×10^{-2}.

29. Using the power rule , $(3^7)^{-2} = 3^5$.

30. If $8^x = \frac{1}{64}$, the value of x is -2.

31. The simplified form of $(256)^{\frac{-1}{4}} \times 4^2$ is $\frac{1}{4}$.
32. The cube of 24 ends with the digit 4.
33. The cube root of 250047 is 63.
34. 79570 is not a perfect cube.
35. Subtracting 10^3 from 1729 gives 9^3.
36. The cube of 0.0012 is 0.000001728.
37. The square root of 225 is 15.
38. The square of 75 is 4925.
39. When a square number ends in 6, its square root will have 6 in the unit's place.
40. A square number will not have odd number of zeros at the end.
41. The number of zeros in the square of 91000 is 9.
42. All rational numbers have an additive inverse.
43. The additive inverse of $\frac{-11}{-17}$ is $\frac{11}{17}$
44. The rational numbers that are equal to their additive inverse are 0 and -1.
45. The multiplicative inverse exists for all rational numbers.
46. The rational number which is its own reciprocal is -1.
47. There are an unlimited number of rational numbers between 10 and 11.
48. The average of two rational numbers lies between them.
49. 0 is smallest rational numbers.
50. $\frac{-4}{5}$ lies to the left of $\frac{-3}{5}$
51. $\frac{-19}{5}$ is greater than $\frac{15}{-4}$.

CHOOSE THE CORRECT ANSWER

1. The sum of the digits of the denominator in the simplest form of $\frac{112}{528}$ is _____

(A) 4 (B) 5 (C) 6 (D) 7

2. The number which is subtracted from $\frac{-6}{11}$ to get $\frac{8}{9}$ is_____.

(A) $\frac{34}{99}$ (B) $\frac{-142}{99}$ (C) $\frac{142}{99}$ (D) $\frac{-34}{99}$

3. Which of the following rational numbers is the greatest?

(A) $\frac{-17}{24}$ (B) $\frac{-13}{16}$ (C) $\frac{7}{-8}$ (D) $\frac{-31}{32}$

4. $\frac{-5}{4}$ is a rational number which lies between _____ .

(A) 0 and $\frac{-5}{4}$ (B) -1 and 0 (C) -1 and 2 (D) -4 and -5

5. Which of the following pairs is equivalent?

(A) $\frac{-20}{12}, \frac{5}{3}$ (B) $\frac{16}{-8}, \frac{-8}{15}$ (C) $\frac{-18}{36}, \frac{-20}{44}$ (D) $\frac{7}{-5}, \frac{-5}{7}$

6. The standard form of the sum $\frac{3}{4}+\frac{5}{6}+\left(\frac{-7}{12}\right)$ is_____.

(A) 1 (B) $\frac{-1}{2}$ (C) $\frac{1}{12}$ (D) $\frac{1}{22}$

7. Which of these rational numbers which have additive inverse?

(A) 7 (B) $\frac{-5}{7}$ (C) 0 (D) all of these

8. $\left(\frac{3}{4}-\frac{5}{8}\right)+\frac{1}{2}=$ ____

(A) $\frac{15}{64}$ (B) 1 (C) $\frac{5}{8}$ (D) $\frac{1}{16}$

9. $\frac{3}{4}\times\left(\frac{5}{8}\div\frac{1}{2}\right)=$ _____

(A) $\frac{5}{8}$ (B) $\frac{2}{3}$ (C) $\frac{15}{32}$ (D) $\frac{15}{16}$

10.. $\frac{3}{4}\div\left(\frac{5}{8}+\frac{1}{2}\right)=$ _____

(A) $\frac{13}{10}$ (B) $\frac{2}{3}$ (C) $\frac{3}{2}$ (D) $\frac{5}{8}$

11. $\frac{3}{4}\times\left(\frac{1}{2}-\frac{1}{4}\right)=\frac{3}{4}\times\frac{1}{2}-\frac{3}{4}\times\frac{1}{4}$ illustrates that multiplication is distributive over

(A)addition (B)subtraction (C)multiplication (D)division

12. Closure property is not true for division of rational numbers because of the number

(A)1 (B) –1 (C) 0 (D) $\frac{1}{2}$

13. $\frac{1}{2}-\left(\frac{3}{4}-\frac{5}{6}\right)\neq\left(\frac{1}{2}-\frac{3}{4}\right)-\frac{5}{6}$ illustrates that subtraction does not satisfy the _____ property for rational numbers.

(A)Commutative (B) Closure (C) Distributive (D)Assosiative

14. Which of the following illustrates the inverse property for addition?

(A) $\frac{1}{8}-\frac{1}{8}=0$ (B) $\frac{1}{8}+\frac{1}{8}=\frac{1}{4}$ (C) $\frac{1}{8}+0=\frac{1}{8}$ (D) $\frac{1}{8}-0=\frac{1}{8}$

15. The square of 43 ends with the digit _____.

(A) 9 (B) 6 (C) 4 (D) 3

16. The number of digits in the square root of 123454321 is _____.

(A) 4 (B) 5 (C) 6 (D) 7

17. $\sqrt{128}-\sqrt{98}+\sqrt{18}=$ ____

(A) 4 (B) 5 (C) 6 (D) 7

18._____ is added to 24^2 to get 25^2

(A) 4^2 (B) 5^2 (C) 6^2 (D) 7^2

19. $\sqrt{48}$ is approximately equal to _____.

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

20. 0.0000000002020 in scientific form is _____.

(A) 2.02×10^{9} (B) 2.02×10^{-9} (C) 2.02×10^{-8} (D) 2.02×10^{-10}

21. $(-2)^{-3}\times(-2)^{-2}=$ ___.

(A) $\frac{-1}{32}$ (B) $\frac{1}{32}$ (C) 32 (D) -32

22. By what number should $(-4)^{-1}$ be multiplied so that the product becomes 10^{-1}?

(A) $\frac{2}{3}$ (B) $\frac{-2}{3}$ (C) $\frac{5}{2}$ (D) $\frac{-5}{2}$

23. which is not correct ?

(A) $\left(\frac{-1}{4}\right)^2=4^{-2}$ (B) $\left(\frac{-1}{4}\right)^2=\left(\frac{1}{2}\right)^4$ (C) $\left(\frac{-1}{4}\right)^2=16^{-1}$ (D) $-\left(\frac{1}{4}\right)^2=16^{-1}$

24.If $\frac{10^x}{10^{-3}} = 10^9$, then x is _____.

$(A)4$ $(B)\ 5$ $(C)\ 6$ $(D)\ 7$

25. If the area of a rectangular land is$(a^2 - b^2)sq.units$ whose breadth is $(a - b)$ then, its length is_____

$(A)a - b$ $(B)a + b$ $(C)a^2 - b$ $(D)\ (a + b)^2$

26. The product of $7p^3$ and $(2p^2)^2$ is

$(A)\ 14p^{12}$ $(B)\ 28p^7$ $(C)9p^7$ $(D)\ 11p^{12}$

27. If the area of a rectangle is $48m^2n^3$ and whose length is $8mn^2$ then, its breadth is_____.

$(A)\ 6mn$ $(B)\ 8m^2n$ $(C)7m^2n^2$ $(D)\ 6m^2n^2$

28.If the area of a square is $36x^4y^2$ then, its side is _____.

$(A)\ 6x^4y^2$ $(B)\ 8x^2y^2$ $(C)6x^2y$ $(D) - 6x^2y$

29.The missing terms in the product $-3m^3n \times 9(\_) = \_\_\_\_m^4n^3$ are

$(A)\ mn^2, 27$ $(B)\ m^2n, 27$ $(C)m^2n^2, -27$ $(D)mn^2, -27$

30.If $x^2 - y^2 = 16$ and $(x + y) = 8$ then $(x - y)$ is _____.

$(A)8$ $(B)\ 3$ $(C)\ 2$ $(D)\ 1$

31.$a^3 + b^3 = (a + b)^3 - \_\_\_$

$(A)3a(a + b)$ $(B)3ab(a - b)$ $(C) - 3ab(a + b)$ $(D)3ab(a + b)$

32.$(a - b) = 3$ and $ab = 5$ then $a^3 - b^3 = \_\_\_\_$

$(A)15$ $(B)\ 18$ $(C)\ 62$ $(D)\ 72$

33. $(p + q)(p^2 - pq + q^2)$ is equal to _____

$(A)p^3 + q^3$ $(B)(p + q)^3$ $(C)p^3 - q^3$ $(D)(p - q)^3$

34. $\frac{(a+b)(a^3-b^3)}{(a^2-b^2)} =$ _____

$(A)a^2 - ab + b^2$ $(B)a^2 + ab + b^2$ $(C)a^2 + 2ab + b^2$ $(D)a^2 - 2ab + b^2$

35. One factor of $x^3 + y^3$ is

$(A)(x - y)$ $(B)(x + y)$ $(C)(x + y)^3$ $(D)(x - y)^3$

36.Factors of $9x^2 + 6xy$ are

$(A)3y, (x + 2)$ $(B)3x, (3x + 3y)$ $(C)6x, (3x + 2y)$ $(D)3x, (3x + 2y)$

37.The factors of $1 - m^3$

$(A)(1 + m), (1 + m + m^2)$ $(B)(1 - m), (1 + m - m^2)$

$(C)(1 - m), (1 + m + m^2)$ $(D)(1 + m), (1 - m + m^2)$

38.Factors of $4 - m^2$ are

$(A)(2 + m)(2 + m)$ $(B)(2 - m)(2 - m)$ $(C)(2 + m)(2 - m)$ $(D)(4 + m)(4 - m)$

39..$(x + 4)$ and $(x - 5)$ are the factors of _____

$(A)x^2 - x + 20$ $(B)x^2 - 9x - 20$ $(C)x^2 + x - 20$ $(D)x^2 + x - 20$

40.The factors of $x^2 - 5x$+6 are $(x - 2)(x - p)$ then the value of p is_____

$(A) - 3$ $(B)3$ $(C)2$ $(D) - 2$

41.Sum of a number and its half is 30 then the number is_____.

(A) 15 (B) 20 (C) 25 (D) 40

42. The exterior angle of a triangle is 120° and one of its interior opposite angle 58°, then the other opposite interior angle is_____.

(A) 62° (B) 72° (C) 78° (D) 68°

43. What sum of money will earn Rs.500 as simple interest in 1 year at 5% per annum?

(A) 50000 (B) 30000 (C) 10000 (D) 5000

44. The product of LCM and HCF of two numbers is 24. If one of the number is 6, then the other number is _____.

(A) 6 (B) 2 (C) 4 (D) 8

45. The largest number of the three consecutive numbers is $x+1$, then the smallest number is

(A) x (B) $x+1$ (C) $x+2$ (D) $x-1$

46. 12% of 250 litre is the same as _____of 150 litre.

(A) 10% (B) 15% (C) 20% (D) 30%

47.If three candidates A, B and C in a school election got 153,245 and 102 votes respectively, then the percentage of votes got by the winner is_____.

(A) 48% (B) 49% (C) 50% (D) 45%

48.15% of 25% of 10000 =_____.

(A) 375 (B) 400 (C) 425 (D) 475

49.When 60 is subtracted from 60% of a number to give 60, the number is

(A) 60 (B) 100 (C) 150 (D) 200

50.If 48% of 48 = 64% of x , then x =

(A) 64 (B) 56 (C) 42 (D) 36

51. A fruit vendor sells fruits for ₹200 gaining ₹40. His gain percentage is

(A) 20% (B) 22% (C) 25% (D) 16 23 %

52. By selling a flower pot for ₹528, a woman gains 20%. At what price should she sell it to gain 25%?

(A) ₹500 (B) ₹550 (C) ₹553 (D) ₹573

53.A man buys an article for ₹150 and makes overhead expenses which are 12% of the cost price. At what price must he sell it to gain 5%?

(A) ₹180 (B) ₹168 (C) ₹176.40 (D) ₹88.20

54.What is the marked price of a hat which is bought for ₹210 at 16% discount?

(A) ₹243 (B) ₹176 (C) ₹230 (D) ₹250

55.The single discount in % which is equivalent to two successive discounts of 20% and 25% is (A) 40% (B) 45% (C) 5% (D) 22.5%

56. The number of conversion periods in a year, if the interest on a principal is compounded every two months is_____.

(A) 2 (B) 4 (C) 6 (D) 12

57. The time taken for ₹4400 to become ₹4851 at 10%, compounded half yearly is _____.

(A) 6 months (B) 1 year (C) (D) 2 years

58. The cost of a machine is ₹18000 and it depreciates at $16\frac{2}{3}$% annually. Its value after 2 years will be_____.

(A) ₹12000 (B) ₹12500 (C) ₹15000 (D) ₹16500

59. The sum which amounts to ₹2662 at 10% p.a in 3 years, compounded yearly is_____.

(A) ₹2000 (B) ₹1800 (C) ₹1500 (D) ₹2500

60. The difference between compound and simple interest on a certain sum of money for 2 years at 2%p.a is ₹1. The sum of money is _____ .

(A) ₹2000 (B) ₹1500 (C) ₹3000 (D) ₹2500

61. Data is a collection of _____

(A) numbers (B) words (C) measurements (D) all the three

62. The number of times an observation occurs in the given data is called _____

(A) tally marks (B) data (C) frequency (D) none of these

63. The difference between the largest value and the smallest value of the given data is _____

(A) range (B) frequency (C) variable (D) none of these

64. The data that can take values between a certain range is called_____

(A) ungrouped (B) grouped (C) frequency (D) none of these

65. Inclusive series is a _____series.

(A) continuous (B) discontinuous (C) both (D) none of these

66. In a class interval the upper limit of one class is the lower limit of the other class. This is _____series.

(A) Inclusive (B) exclusive (C) ungrouped (D) none of these

67. The graphical representation of ungrouped data is _____

(A) histogram (B) frequency polygon (C)pie chart (D) all the three

68. Histogram is a graph of a _____ frequency distribution.

(A) continuous (B) discontinuous (C) discrete (D) none of these

69. A _____ is a line graph for the graphical representation of the continuous frequency distribution.

(A) frequency polygon (B) histogram (C) pie chart (D) bar graph

70. The graphical representation of grouped data is _____

(A) bar graph (B) pictograph (C) pie chart (D) histogram

71. In a class there are 26 boys and 15 girls. The teacher wants to select a boy or a girl to represent a quiz competition. In how many ways can the teacher make this selection?

(A) 41 (B) 26 (C) 15 (D) 390

72.. How many outcomes can you get when you toss three coins once?

(A) 6 (B) 8 (C) 3 (D) 2

73. In how many ways can you answer 3 multiple choice questions, with the choices A,B,C and D?

(A) 4 (B) 3 (C) 12 (D) 64

74. How many 2 digit numbers contain the number 7 ?

(A) 10 (B) 18 (C) 19 (D) 20

75.What is the eleventh Fibonacci number?

(a) 55 (b) 77 (c) 89 (d) 144

76. If F(n) is a Fibonacci number and n =8, which of the following is true?

(a) F(8) = F(9)+F(10) (b) F(8) = F(7)+F(6) (c) F(8) = F(10)×F(9) (d) F(8) = F(7)–F(6)

77. Every 3rd number of the Fibonacci sequence is a multiple of _____

(a) 2 (b) 3 (c) 5 (d) 8

78. Every _____ number of the Fibonacci sequence is a multiple of 8

(a) 2nd (b) 4th (c) 6th (d) 8th

79. The difference between the 18th and 17th Fibonacci number is

(a) 233 (b) 377 (c) 610 (d) 987

80. Common prime factors of 30 and 250 are

(a) 2 x 5 (b) 3 x 5 (c) 2 x 3 x 5 (d) 5 x 5

81. Common prime factors of 36, 60 and 72 are

(a) 2 x 2 (b) 2 x 3 (c) 3 x 3 (d) 3 x 2 x 2

82. Two numbers are said to be co-prime numbers if their HCF is

(a) 2 (b) 3 (c) 0 (d) 1

83. l always have _____angles

(A) acute (B) obtuse (C) right (D) matching

84. A flag pole 15 m high casts a shadow of 3 m at 10 a.m. The shadow cast by a building at the same time is 18.6 m. The height of the building is

(A) 90 m (B) 91 m (C) 92 m (D) 93 m

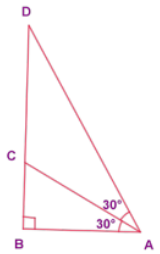
85. If $\Delta ABC \sim \Delta PQR$ in which $\angle A = 53°$and $\angle A = 77°$, then $\angle R$ is

(A) 50° (B) 60° (C) 70° (D) 80°

86. In the figure, which of the following statements is true?

(A) AB = BD (B) BD < CD

(C) AC = CD (D) BC = CD



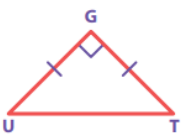
87. The hypotenuse of a right angled triangle of sides 12cm and 16cm is _____.

(A) 28 cm (B) 20 cm (C) 24 cm (D) 21 cm

88. The area of a rectangle of length 21cm and diagonal 29cm is _____.

(A) 609 cm^2 (B) 580 cm^2 (C) 420cm^2 (D) 210 cm^2

89. The sides of a right angled triangle are in the ratio 5:12:13 and its perimeter is 120 units then, the sides are _____.



(A) 25, 36, 59 (B) 10,24,26 (C) 36, 39, 45 (D) 20,48,52

90. If ΔGUT is isosceles and right angled, then $\angle$TUG is _____.

(A) 30° (B) 40° (C) 40° (D) 55°

91. In questions **(i)** and **(ii),** there are four groups of letters in each set. Three of these sets are alike in some way while one is different. Find the one which is different.

(i). (A) C R D T (B) A P B Q (C) E U F V (D) G W H X

(ii). (A) H K N Q (B) I L O R (C) J M P S (D) A D G J

92. A group of letters are given. A numerical code has been given to each letter. These letters have to be unscrambled into a meaningful word. Find out the code for the word so formed from the 4 answers given.

L	I	N	C	P	E
1	2	3	4	5	6

(A)2 3 4 1 5 6 (B) 5 6 3 4 2 1 (C) 6 1 3 5 2 4 (D) 4 2 1 3 5 6 9.

93.Questions (iii) and (iv) are based on code language. Find the correct answer from the four alternatives given.

(iii)In a certain code, **'M E D I C I N E'** is coded as **'E O J D J E F M'**,

then how is **'C O M P U T E R'** written in the same code ?

(A)C N P R V U F Q (B) C M N Q T U D R (C) R F U V Q N P C (D) R N V F T U D Q

(iv) If the word **'P H O N E '** is coded as **'S K R Q H'**, how will **'R A D I O'** be coded ?

(A) S C G N H (B) V R G N G (C) U D G L R (D) S D H K Q