A K M PUBLIC SCHOOL
FIRST SEMESTER EXAMINATION (SAMPLE QUESTION PAPER)
CLASS VIII MATHEMATICS

MARK: 50
TIME: 2 hrs

MULTIPLE CHOICE QUESTIONS **1 X 12 = 12**

1. If $\frac{t}{5} = 4$ then t is equal to
   (4, 5, 20)
2. The sum of interior angles of a quadrilateral is ____.

   (180º, 360º, 720º)

3. The number of times a particular observation occurs is called the _____.
   (range, mean, frequency)
4. The solution of the equation $7x = 49$.
   (7, -7, 9)
5. To construct a quadrilateral the minimum number of measurements required is _____.
   (4, 5, 6)
6. A die is thrown what is the probability of getting an even prime number
   $(\frac{1}{6}, \frac{1}{4}, \frac{1}{3})$
7. Which of the following numbers would have digit 6 at units place
   $(18^2, 14^2, 37^2)$
8. The perfect square number out of 2,3 and 4 is _____
   (2,4,3)
9. The angle sum of convex polygon with number of 7 sides
   (1080, 720, 900)
10. Assertion: The number of sides of a quadrilateral is 4
    Reason: In geometry a quadrilateral is a four sided polygon having four sides and four vertices.
    a. Both assertion and reason are true in the correct explanation of assertion
    b. Both assertion and reason are true but reason is not the correct explanation of assertion
    c. Assertion is true but reason is false
    d. Assertion is false and reason is true

FIIL IN THE BLANKS **1/2 X 10 =5**

11. An equation contains the sign of _____.
12. A polygon of 7 sides is _____.
13. Line segment joining the opposite vertices of a quadrilateral is called its _____.
14. The probability of an event lies between _____ and _____.
15. The square of a prime number is always _____.
16. In the class interval 10-20, 20-30 etc respectively 20 lies in the class_____.
17. The perfect square lies between 40 and 50 is _____.

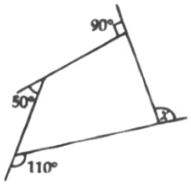
18. A number multiplied to itself gives _____ of the number.
19. In a parallelogram diagonals_____ each other.
20. A linear equation in one variable has _____solution.

Match the following **1x 4 = 4**

21. The difference between the highest and lowest value of the given data is called	_ piechart
22. It is the graphical representation of a grouped frequency distribution in the form of rectangles of equal width	_ histogram
23. The representation of data and circle is called	_ bar graph
24. The pictorial representation of data using bar of uniform width is called	_ Range

SHORT ANSWER QUESTIONS 5 x 2 = 10

25. $12y - 7 = 9$
26. Find measure x in the following



27. When a die is thrown list the probabilities of
    i. Getting a prime number
    ii. Getting a number greater than 2

28. Find the square root of 1764 using prime factorisation

29. Find the smallest whole number by which it should be multiplied so as to get a perfect square number 252

Question 30-33 carries 3 marks each

30. Find a Pythagorean triplet whose one number is 14.

31. Find the square root of 7744 by long division method.

32. Construct quadrilateral PQRS where PQ=4cm QR=6cm RS=5cm PS=5.5 PR=7cm

33. Solve

$$\frac{x}{x+15} = \frac{4}{9}$$

Question 34 carries 4 marks

34. Shoes of the following brands are sold in November 2017 at a shoe store. Construct a pie chart for the data

Question 33 carries 5 marks

35. Case study

In a hypothetical sample of 20 people the amount of money (in thousands of rupees)

114, 108, 150, 98, 101, 109, 117, 119, 126, 131, 136, 143, 156, 169, 182, 195,207, 219, 235, 118

1. Set frequency distribution table of the class interval 50 – 10.
2. Draw a histogram .
3. Which class interval has maximum frequency?
4. What is the size of the class interval?
5. The lower limit of the class interval 150-200 is _____.