Application no: _____   Name: _____

Model Test Paper – 2022-23   **Date:**

MATHEMATICS

Total Max.Marks:25   Time: 30 minutes

Instructions:
        Read the questions carefully before you start writing.
        Attempt all the questions
        Use the back portion of the paper for calculations

Q-1 Fill in the blanks   **[5]**

   a) The smallest positive integer is _____.

   b) If $\frac{5}{2}x = \frac{25}{4}$ then x=_____.

   c) A triangle has _____medians.

   d) When a die is thrown, the probability of getting 2 is _____.

   e) $3^0 + x^0 + 1 =$ _____.

Q-2 State whether each of the following statements is True or False   **[5]**

   a) All integers and fractions are rational numbers.   [   ]

   b) Area of square = 4 X Side.   [   ]

   c) Congruent objects are exact copies of one another.   [   ]

   d) A right angled triangle has at least two acute angles.   [   ]

   e) A mean of the given data is always one of the numbers.   [   ]

Q-3 Choose and tick [√]the correct alternative.   **[5]**
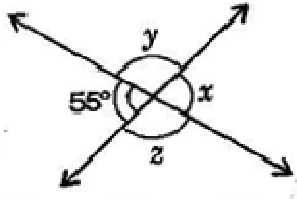
   a) The circumference of a circular sheet is 44 cm. What will be its radius?
      (i)   7   (ii)   22   (iii)   11   (iv) 88

   b) If a=3 and b=2 then the value of (10a-5b) is

      (i) 25   (ii) 20   (iii) 10   (iv)17

   c) The mean of first ten whole numbers is
      (i) 5   (ii) 4.5   (iii) 5.5   (iv) 4

   d) Find the value of $\left(\left(2\right)^3\right)^2$
      (i) 128   (ii) 4   (iii) 32   (iv) 64

   e) $0.00317 =$ _____ $\div 100000$
      (i) 317   (ii) 3170   (iii) 31.7   (iv) 31700

Q-4 Do as directed. [5x2=10]

(a) Find the unknown angles in the following figures.

(b)(i) Find $5\dfrac{3}{2} + 2$

(ii) Find $\dfrac{49}{4} \div \dfrac{7}{16}$

(c) Subtract $(4pq-5q^2-3p^2)$ from $(5p^2+3q^2-pq)$.

d) Simplify $\dfrac{3^8 \times b^9}{\left(9^4\right) \times b^5}$

e) The perimeter of a rectangle is 50 cm and the length is 10cm. Find the breath and area of the rectangle.