# **SUB- MATHEMATICS, CLASS-IX CHAPTER -LINEAR EQUATION IN TWO VARIABLES WORKSHEET (ADVANCE)**

**TIME-45MINS MAXIMUM MARKS-20** 

## CHOOSE THE CORRECT OPTION. (MCQ $(2 \times 1 = 2)$

- 1. The positive solutions of the equation ax + by + c = 0 always lie in the
- (A) 1st quadrant
- (B) 2nd quadrant
- (C) 3rd quadrant
- (D) 4th quadrant

- 2. The point of the form (a, -a) always lies on the line
- (A) x = a
- (B) y = -a (C) y = x
- (D) x + y = 0

#### FILL IN THE BLANKS $(2 \times 1 = 2)$

- 3. The graph of the linear equation y = x passes through -----
- 4. The points (1,3), (2,3) and (4,3) are -----

#### ANSWER THE FOLLOWING. $(2 \times 1 = 2)$

- 5. Find the point of intersection of the line represented by the equation 5x + 7y = 10 with the *x*-axis.
- 6. Every point on the graph of a linear equation in two variables does not represent a solution of the linearequation. State whether the above statement is true or false with reason.

# SHORT ANSWER TYPE QUESTIONS-I: $(2 \times 2 = 4)$

- 7. Determine the point on the graph of the linear equation 2x + 5y = 19, whose ordinate is  $1\frac{1}{2}$  times its abscissa.
- 8. If the point (2k-3, k+2) lies on the graph of the equation 2x + 3y + 15 = 0, find the value of k.

## SHORT ANSWER TYPE QUESTIONS-II : $(2 \times 3 = 6)$

- 9. Find the solution of the linear equation x + 2y = 8 which represents a point on
- (i) the x- axis

- (ii) the y axis.
- (iii) the line parallel to x-axis and at a distance of 3 units above it.
- 10. In the linear equation y = 4x + 13, if x is the number of hours a labourer is on work and y are his wages in rupees then draw the graph. Also find the wages when work is done for 6 hours

#### LONG ANSWER TYPE QUESTIONS: $(1 \times 4 = 4)$

11. Draw the graph of the equation x = 4 and = 5. Find the distance between the point of intersection of the graphs and the origin. Also find the area formed by the graphs and the coordinate axes.