# SUBJECT- MATHEMATICS, CLASS-IX CHAPTER-LINEAR EQUATION IN TWO VARIABLES WORKSHEET (BASIC) 

TIME-45 MINS
MAXIMUM MARKS-20

## Choose the correct option. (2X1=2)

1.A linear equation in two variables is of the form $a x+b y+c=0$, where
(a) $\mathrm{a} \neq 0, \mathrm{~b} \neq 0$
(b) $a=0, b \neq 0$
(c) $a \neq 0, b=0$ (d) $a=0, c=0$
2.The graph of the linear equation $2 x+3 y=6$ is a line which meets the $x$-axis at the point:
(a) $(0,2)$
(b) $(2,0)$
(c) $(3,0)$
(d) $(0,3)$

Fill in the blanks: (2X1=2)
3: Any point on the $x$-axis is of the form(--------).
4: The graph of $\mathrm{y}=\mathrm{mx}$ is a straight line, passes through------ .

## Answer the following: (2X1=2)

5: If the point $(3,4)$ lies on the graph of the equation $3 y=a x+7$,find the value of a.
6: Find the value of $k$, if $(2,0)$ is a solution of the linear equation $2 x+3 y=k$.
Short Answer Type Questions-I: (2X2=4)
7:The cost of a pen is four times the cost of a pencil.Express the statement as a linear equation in two variables.

8:Write four solutions for the following equation : $3 \mathrm{x}-4 \mathrm{y}=12$.

## Short Answer Type Questions-II: (2X3=6)

9: Give the geometrical representation of the equation $\mathrm{y}=2$ as an equation in:
a)one variable. b)two variables.

10: Draw the graph of the equation $3 x-4 y-13=0$ and check whether the point $(3,-1)$ belongs to the line.

## Long Answer Type Question(1X4=4)

11: Draw the graph of $2 x-y+4=0$.
a)Find the points of intersection of the graph with axes.
b)Find the area between the lines and axes.

