

*** Choose the right answer from the given options. [1 Marks Each]**

[10]

1. $x = 2, y = -1$ is a solution of the linear equation:
 (A) $x + 2y = 0$ (B) $x + 2y = 4$ (C) $2x + y = 0$ (D) $2x + y = 5$
2. A linear equation in two variables x and y is of the form $ax + by + c = 0$, where:
 (A) $a \neq 0, b \neq 0$ (B) $a \neq 0, b = 0$ (C) $a = 0, b \neq 0$ (D) $a = 0, c = 0$
3. The graph of the equation $x + y = 4$.
 (A) Intersects both the axis. (B) Parallel to the x -axis. (C) Intersects x -axis only. (D) Intersects y -axis only.
4. All linear equations in two variables have _____.
 (A) One solution (B) Infinitely many solutions (C) Three solutions (D) Two solution
5. The graph of the linear equation $2x + 3y = 6$ is a line which meets the x -axis at the point.
 (A) $(0, 2)$ (B) $(0, 3)$ (C) $(3, 0)$ (D) $(2, 0)$
6. The graph of the linear equation $2x + 5y = 10$ meets the x -axis at the point.
 (A) $(0, 5)$ (B) $(5, 0)$ (C) $(0, 2)$ (D) $(2, 0)$
7. The equation $2x + 5y = 7$ has a unique solution, if x and y are:
 (A) Natural numbers. (B) Rational numbers. (C) Positive real numbers. (D) Real numbers.
8. The equation of the y -axis is:
 (A) $x = 0$ (B) $y = 0$ (C) $x + y = 0$ (D) $x = y$
9. Write the correct answer in the following:
 Any point on the X -axis is of the form,
 (A) (x, y) (B) $(0, y)$ (C) $(x, 0)$ (D) (x, x)
10. How many lines pass through two points?
 (A) Two. (B) Only one. (C) Many. (D) Three.

*** Answer the following short questions. [2 Marks Each]**

[8]

11. Find four different solutions of the equation $x + 2y = 6$
12. The cost of ball pen is Rs. 5 less than half of the cost of fountain pen. Write this statement as a linear equation in two variables.
13. If $x = -1, y = 2$ is a solution of the equation $3x + 4y = k$, find the value of k .
14. If the point $(2, -2)$ lies on the graph of the linear equation $5x + ky = 4$, find the value of k .

*** Answer the following questions. [3 Marks Each]**

[12]

15. Write two solutions of the form $x = 0, y = a$ and $x = b, y = 0$ for the following equations:
 $2x + 3y = 24$
16. Write two solutions of the form $x = 0, y = a$ and $x = b, y = 0$ for the following equations:
 $-4x + 3y = 12$
17. Solve the equation $2y - 1 = y + 1$ and represent it graphically on the coordinate plane.
18. If the point $(a, 2)$ lies on the graph of the linear equation $2x - 3y + 8 = 0$, find the value of a .
