Test- Linear Equation with two variables

Q.1 Express the following linear equations in the form ax + by + c = 0 and indicate the values of a, b and c in each case:

(i) $x - y/5 - 10 = 0$ (ii) $-2x+3y = 6$ (iii) $y - 2 = 0$

Q.2 Write four solutions for each of the following equations:

(i) $2x + y = 7$ (ii) $\pi x + y = 9$

Q.3 Find the value of k, if x = 2, y = 1 is a solution of the equation 2x + 3y = k.

Q.4 The price of a notebook is twice the cost of a pen. Note a linear equation in two variables to illustrate this statement.

(Taking the price of a notebook to be ₹ x and that of a pen to be ₹ y)

Q.5 MCQ : The linear equation 2x -5y = 7 has

(A) A unique solution

(B) Two solutions

(C) Infinitely many solutions

Q.6 Draw the graph linear equations y = 3x in two variables

Q.7 Show that the points A (1, 2), B (– 1, – 16) and C (0, – 7) lie on the graph of the linear equation y = 9x – 7.

Q.8 Yamini and Fatima, two students of Class IX of a school, together contributed ₹ 100 towards the Prime Minister's Relief Fund to help the earthquake victims. Write a linear equation which satisfies this data (You may take their contributions as ₹ x and ₹ y). Draw the graph of the same.

Q.9 Give the geometric representations of 2x+9 = 0 as an equation:

- **in one variable**
- **in two variables**

Q.10 Write the linear equation such that each point on its graph has an ordinate 3 times its abscissa