**Assignment – 4**

Assigned To = All 9 Class Students

**Chapter = LINEAR EQUATION IN TWO VARIABLES**

**MM = 20**

Q1. **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**

**Q2. Write four solutions for each of the following equations:**

1. **2x + y = 7**
2. **πx + y = 9**

**Q3. Find the value of k, if x = 2, y = 1 is a solution of the equation 2x + 3y = k.**

**Q4. Draw the graph of each of the following linear equations in two variables:**

1. **y = 3x**
2. **3 = 2x + y**

**Q5.** **If the point (3, 4) lies on the graph of the equation 3y = ax + 7, find the value of a.**

**Q6.   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.**

**Q7. Draw the graph of the linear equation 3x + 4y = 6. At what points, the graph cuts X and Y-axis?**

**Q8.** The taxi fare in a city is as follows: For the first kilometre, the fare is ₹ 8 and for the subsequent distance it is ₹5 per km. Taking the distance covered as x km and total fare as ₹ y, write a linear equation for this information, and draw its graph.

Q9. If the work done by a body on application of a constant force is directly proportional to the distance travelled by the body, express this in the form of an equation in two variables and draw the graph of the same by taking the constant force as 5 units. Also read from the graph the work done when the distance travelled by the body is:

* + 2 units
  + 0 unit

Q10. What is the graph of the linear equation 2x +3y = 6 that cuts the y-axis at the point?

a) (2, 0)

b) (0, 3)

c) (3, 0)

d) (0, 2)