Comprehensive Test Series-09

LINEAR EQUATIONS IN TWO VARIABLES

TIME: 1 hr. **MM: 25**

General Instructions:

- All Questions are compulsory.
- Marks are given alongwith the questions individually.
- Use of calculator is not permitted.

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: (1)

(i) $x - \frac{y}{5} - 10 = 0$

(ii) $-2x + 3y = 6$

(iii) $x = 3y$

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

(i) $2x + y = 7$ (2)

(ii) $x = 4y$

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

Q.4 Draw the graph of each of the following linear equations in two variables: (3)

(i) $x - y = 2$

(ii) $y = 3x$

(iii) $y = x$

(iv) $x + 2y = 6$

Q.5 The taxi fare in a city is as follows: For the first kilometer, the fare is Rs 8 and for the subsequent distance it is Rs 5 per km. Taking the distance covered as x km and total fare as Rs y, write a linear equation for this information, and draw its graph. (4)

Q.6 Give the geometric representations of $2x + 9 = 0$ as an equation (2)

(i) In two variables. And Draw graph