

**M.M. 30**

**Linear equations in two variables**

**Time 1 hour 10 Min**

## Section A 1 mark each

- Q1. Define a linear equation in two variables.
- Q2. What do you mean by solution of linear equation in two variables?
- Q3. Is  $2x + 3y + z = 0$  this a linear equations in two variables?
- Q4. Check if  $x = 2, y = 3$  is a solution of  $3x + 2y = 12$
- Q5. Write  $x = -3$  as a linear equation in two variables.

## Section B 2 marks each

- Q6. Find a if  $(1, 2)$  is a solution of  $2x + ay = 15$
- Q7. Write equation of a line passing through  $(3, -5)$ . How many such lines are possible?

## Section C 3 marks each

- Q8. Draw the graph of  $x + y = -7$ . Shade the triangle formed between the x axis, y axis and the given line.
- Q9. Write the equation of a line parallel to x-axis and draw its graph.
- Q10. Draw the graph of  $2x - 3y = -6$ . From the graph find the coordinates of the points where the line meets x axis and y axis.

## Section D 6 marks each

- Q11. The taxi fare in a city is as follows: For the first 5 km the fare is Rs 10 per Km and after that Rs 8 per Km. Taking distance covered as  $x + 2$  km and total fare as Rs.  $y - 6$ , write a linear equation, solve it and draw its graph.
- Q12. Solve the equation  $3x + 1 = x + 1$  and represent the solution on  
(1) number line (2) the Cartesian plane

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