

# **VIVEK TUTORIALS**

**Practice Test** 

Std: SSC (E.M) Date : 21/Apr/2019

#### Subject: Mathematics I Chapter 2

Time: 30Min Max Marks: 20

- Q.1 Choose the correct alternative answer for each of the following questions:
  - 1) Which one is the quadratic equation ?

(A)  $\frac{5}{x} - 3 = x^2$  (B) x(x+5) = 2 (C) n - 1 = 2n (D)  $\frac{1}{x^2}(x+2) = x$ 

- 2) The roots of  $x^2 + kx + k = 0$  are real and equal, find k. (A) 0 (B) 4 (C) 0 or 4 (D) 2
- 3) Out of the following equations which one is not a quadratic equation ?
  - (A)  $x^2 + 4x = 11 + x^2$
  - (B)  $x^2 = 4x$
  - (C)  $5x^2 = 90$

(D) 
$$2x - x^2 = x^2 + 5$$

- 4) Choose the equation which is not quadratic
  - a)  $2x^2 6x = 0$
  - b)  $x + 2\sqrt{x} 3 = 0$ c)  $x + \frac{3}{x} = 5$
  - d)  $x+3 = -\frac{1}{2}$

## Q.2 Complete the following Activities

1) Complete the following activity. Say the following is a quadratic equations or not?  $9y^2 + 5 = 0$ 

In the equation  $9y^2 + 5 = 0$  is the only variable and maximum index of the variable is

.:. It a quadratic equation.

2) Complete the following activity. Say the following is a quadratic equations or not?  $M^3 - 5m^2 + 4 = 0$ 

In the equation  $m^3 - 5m^2 + 4 = 0$  is the only variable but maximum index

of the variable is not 2.

∴ It a quadratic equation.

## Q.3 Solve the following questions

- 1) Is it a quadratic equation ?Explain.  $3x^2 - 5x + 3 = 0$
- 2)  $2x^2 7x + 6 = 0$  check whether (i) x = 3/2, (ii) x = -2 are solutions of the equations.
- 3) Write the following equation in the form  $ax^2 + bx + c = 0$ , then write the values of a, b, c for each equation:  $3m^2 = 2m^2 - 9$

6

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#### Q.4 Solve the following questions

- Write the following equation in the form ax<sup>2</sup> + bx + c = 0, then write the values of a, b, c for each equation:
  x<sup>2</sup> + 5x = -(3 x)
- 2) Solve the following quadratic equation by factorisation:  $6\sqrt{3} x^2 + 7x = \sqrt{3}$

----- All the Best ------