Q.1 Which of the following are the roots of the quadratic equation $x^2 - 9x + 20 = 0$?

(a) 3, 4 (b) 4, 5 (c) 5, 6 (d) 6, 7

Q.2 Which of the following equations has 2 as a root?

(a) $x^2 - 4x + 5 = 0$ (b) $x^2 + 3x - 12 = 0$ (c) $2x^2 - 7x + 6 = 0$ (d) $3x^2 - 6x - 2 = 0$

Q.3 Which of the following is not a quadratic equation?

(a) $(x + 2)^2 - 2(x + 3)$ (b) $x^2 + 3x - (-1)(x - 3x)^2$ (c) $(x + 2)(x - 1) = -2x - 3$ (d) $x^2 - x^2 + 2x + 1 = (x + 1)^3$

Q.4 Which of the following is a quadratic equation?

(a) $x^2 + 2x + 1 = (4 - x)^2 + 3$ (b) $-2x^2 - (5 - x)(x - 2/3)$ (c) $(k + 1)x^2 + 3/x^2 = 7$, where $k = -1$ (d) $x^2 - x^3 - (x - 1)^3$

Q.5 If $x = 3$ is one of the roots of the quadratic equation $x^2 - 2kx - 6 = 0$, then the value of k is

(a) 1/2 (b) 3/2 (c) 3 (d) 2

Q.6 If the quadratic equation $x^2 + 4x + k = 0$ has real and equal roots, then

(a) $k > 4$ (b) $k > 2$ (c) $k = 4$ (d) $k = 2$

Q.7 Find the value(s) of k for which the quadratic equation $x^2 + (2\sqrt{2})x + 18 = 0$ has equal

roots

(a) 3, –3 (b) 9 (c) 9, –9 (d) √18, –√18

Q.8 Which of the following equations has no real roots?

(a) $x^2 + 3x + 3\sqrt{2} = 0$ (b) $4x^2 – 3\sqrt{2}x = 0$ (c) $x^2 – 3\sqrt{2} = 0$ (d) $3x^2 + 4x + 4 = 0$

Q.9 The nature of roots of the quadratic equation $2x^2 – 2x = 0$ is:

(a) No real roots (b) 2 equal real roots (c) 2 distinct real roots (d) More than 2 real roots

Q.10 Value(s) of k for which the quadratic equation $2x^2 – kx + 0$ has equal roots is:

(a) 0 only (b) 4 only (c) 8 only (d) 0, 8

Answer keys:

Q.1 b, Q.2 c, Q.3 c, Q.4 d , Q.5 b, Q.6 c, Q.7 a, Q.8 a , Q.9 c , Q.10 d

Related posts:

1. Class 11Mathematics Q1 (Quadratic equation)
2. Class 11 Mathematics Q2 (Quadratic equation)
3. Class 11 Mathematics Q3 (Quadratic Equation):
4. Class 11 Mathematics : Questions based on quadratic equations: Q4 – Q6