MCQs on Chapter 2: Polynomials for Class 10 Maths

Q1. Which of the following is a quadratic polynomial?
(A) $x^3 + 2x + 1$
(B) $2x^2 + 3x - 5$
(C) $3x + 7$
(D) $\sqrt{x} + 2$
Q2. A polynomial of degree 1 is called a:
(A) Cubic polynomial
(B) Quadratic polynomial
(C) Linear polynomial
(D) Biquadratic polynomial
Q3. If $p(x) = x^2 - 3x - 4$, what is the value of $p(-1)$?
(A) 6
(B) –6
(C) 0
(D) 4
Q4. The graph of $y = ax^2 + bx + c$ ($a \neq 0$) is a:
(A) Straight line
(B) Parabola
(C) Circle
(D) Hyperbola
Q5. If the graph of $y = p(x)$ does not intersect the x-axis at all, how many zeroes does $p(x)$ have?
(A) 1
(B) 2
(C) Infinitely many
(D) 0
Q6. If α and β are the zeroes of the polynomial $ax^2 + bx + c$, then $\alpha + \beta$ equals:
(A) c/a
(B) $-b/a$
(C) b/a
(D) $-c/a$
Q7. For the polynomial $2x^2 - 8x + 6$, the sum of zeroes is:

(A) 4
(B) –4
(C) 3
(D) –3

Q8. If one zero of the polynomial $4x^2 – 8kx – 9$ is the negative of the other, the value of k is:
(A) 0
(B) 1
(C) –1
(D) 9

Q9. A quadratic polynomial with sum of zeroes = $\sqrt{2}$ and product = 1/3 is:
(A) $3x^2 – 3\sqrt{2}x + 1$
(B) $3x^2 + 3\sqrt{2}x + 1$
(C) $x^2 – \sqrt{2}x + 3$
(D) $x^2 + \sqrt{2}x + ⅓$

Q10. If both zeroes of a quadratic polynomial are equal to 3, the polynomial is:
(A) $x^2 – 9$
(B) $x^2 + 6x + 9$
(C) $x^2 – 6x + 9$
(D) $x^2 – 3x + 9$

Q11. The graph of y = p(x) intersects the x-axis at 3 points. The degree of p(x) could be:
(A) 1
(B) 2
(C) 3
(D) Both B and C

Q12. Which of the following is a zero of the polynomial $p(x) = x^2 – 2x – 8$?
(A) x = 2
(B) x = –2
(C) x = 4
(D) Both B and C

Q13. For the polynomial $4s^2 – 4s + 1$, how many distinct zeroes does it have?
(A) 0
(B) 1
(C) 2

(D) 3

Q14. A quadratic polynomial with sum of zeroes = 1/4 and product = –1 is:

(A) $4x^2 + x – 4$

(B) $4x^2 – x + 4$

(C) $4x^2 – x – 4$

(D) $x^2 + x/4 – 1$

Q15. A quadratic polynomial with zeroes 0 and $\sqrt{5}$ is:

(A) $x^2 – \sqrt{5}$

(B) $x^2 + \sqrt{5}x$

(C) $x^2 – \sqrt{5}x$

(D) $x^2 + \sqrt{5}$

Answer Key

1 - a, 2 - c, 3 - c, 4 - b, 5 - d, 6 - b, 7 - a, 8 - a, 9 - a, 10 - c, 11 - c, 12 - d, 13 - b, 14 - c, 15 - c