ECAT Pre General Science Mathematics Online Test

Sr	Questions	Answers Choice
1	Roots of the equation $x^2+ 5x - 1 = 0$ are	A. Rational B. Irrational C. Complex D. None of these
2	Roots of the equation $x^2+ 2x + 3 = 0$ are	A. Real and equal B. Real and distinct C. Complex D. None of these
3	The roots of the equation $ax^2+ bx + x = 0$ are real and distinct if	A. b²- 4ac <0 B. b²- 4ac = 0 C. b²- 4ac > 0 D. None of these
4	The roots of the equation $ax^2+ bx + c = 0$ are complex/imaginary if	A. b²- 4ac < 0 B. b²- 4ac = 0 C. b²- 4ac > 0 D. None of these
5	The roots of the equation $ax^2+ bx + c = 0$ are real and equal if	A. b²- 4ac < 0 B. b²- 4ac = 0 C. b²- 4ac > 0 D. None of these
6	If S and P are the sum and the product of roots of a quadratic equation, then the quadratic equation is	A. x²+ Sx - P = 0 B. x²- Sx + P = 0 C. x²- Sx - P = 0 D. X²+ Sx + P = 0
7	Question Image	A. c/a B. -c/a C. b/a D. -b/a
8	If $3x^4+ 4x^3+ x - 5$ is divided by x + 1, then the reminder is	A. 0 B. 7 C. -7 D. 5
9	If $x^3- x^2+ 5x+ 4$ is divided by x - 2, then the reminder is	A. 0 B. 2 C. 18 D. 14
10	If $x^4- 10x^2- 2x + 4$ is divided by x + 3, then the reminder is	A. 1 B. 0 C. 4 D. None of these
11	If $x^3+ 4x^3- 2x +5$ is divided by x - 1, then the reminder is	A. 8 B. 6 C. 4 D. None of these
12	If a polynomial P(x) is divided by x + a, then the remiander is	A. P(a) B. P(-a) C. P(0) D. None of these
13	$2x^3+ 3x + 9$ is a _____	A. Polynomial of degree 3 B. Quadratic equation C. Cubic equation D. Polynomial of degree 2
14	If $x^3+ ax^2- a^2x - a^3$is divided by x + a, then the remainder is	A. 0 B. a³ C. 2a³ D. -2a³
15	If a polynomial P(x) is divided by x - a, then the remainder is	A. P(o) B. P(-a) C. P(a) D. None of these

16	The quadratic formula is	
17	The solution set of $x^2 - 5x + 6 = 0$ is	A. {1, 3} B. {2, 3} C. {1, 2} D. None of these
18	$5x^3 + 3x -$ is a _____	A. Polynomial of degree 3 B. Polynomial of degree 2 C. Polynomial of degree 1 D. Polynomial of degree 0
19	Question Image	A. Polynomial of degree 0 B. Polynomial of degree 2 C. Quadratic equation D. None of these
20	Question Image	A. Linear equation B. Quadratic equation C. Cubic equation D. None of these
21	Question Image	A. Polynomial of degree 0 B. Polynomial of degree 1 C. Polynomial of degree 2 D. Polynomial of degree n
22	$w^{11} =$ _____	A. 0 B. 1 C. w D. w²
23	$w^{-12} =$ _____	A. 0 B. 1 C. w D. w²
24	$w^4 =$ _____	A. 0 B. 1 C. w D. w²
25	$w^{-1} =$ _____	A. 0 B. 1 C. w D. w²
26	$w^{15} =$ _____	A. 0 B. 1 C. w D. w²
27	$x^4 - 3x^3 + 3x + 1 = 0$ is called _____	A. Reciprocal equation B. Exponential equation C. Radical equation D. None of these
28	Question Image	A. Reciprocal equation B. Exponential equation C. Radical equation D. None of these
29	$4^{1+x} + 4^{1-x} = 10$ is called	A. Reciprocal equation B. Exponential equation C. Radical equation D. None of these
30	Roots of the equation $x^2 - x = 2$ are	A. {2, -1} B. {1, 0} C. {2, 1} D. {-2, 1}