ECAT Mathematics Chapter 6 Quadratic Equations Online Test

Sr	Questions	Answers Choice
1	If the roots of $ax^2 + bx + c = 0$ are equal in magnitude but opposite in sign, then	A. a = 0 B. b = 0 C. c = 0 D. None of these
2	Question Image	A. b = c B. a = c C. a = c D. b = 0
3	The quadratic equation $8\sec^2\theta - 6\sec\theta + 1 = 0$ has	A. Infinitely many roots B. Exactly two roots C. Exactly four roots D. No roots
4	If a > 0, b > 0, c > 0, then the roots of the equation $ax^2 + bx + c = 0$ are	A. Real and negative B. Non-real with negative real parts C. Real and positive D. Nothing can be said
5	If one root of the equation $ix^2 - 2(i + 1)x + (2 - i) = 0$ is 2 - i, then the other root is	A. -i B. 2 + i C. i D. 2 - i
6	If the roots of $ax^2 + b = 0$ are real and distinct then	A. ab > 0 B. a = 0 C. ab < 0 D. a > 0, b > 0
7	If $ax^2 + bx + x = 0$ is satisfied by every value of x, then	A. b = 0, c = 0 B. c = 0 C. b = 0 D. a = b = c = 0
8	Both the roots of the equation (x - b) (x - c) + (x - c)(x - a) + (x - a)(x - b) = 0 are always	A. Positive B. Negative C. Real D. None of these
9	Question Image	
10	Question Image	
11	The condition for polynomial equation $ax^2 + bx + c = 0$ to be quadratic is	
12	Question Image	
13	Question Image	A. 4 B. 6 C. 8 D. 10
14	Question Image	A. 2 B. 4 C. 8 D. 16
15	Question Image	A. 0 B. 1 C. 2 D. 3
16	The cube roots of 8 are	
17	Question Image	A. 1 B. -1 C. 5 D. 2
18	Question Image	A. -1 B. 0 C. 2

		D. 1
19	Question Image	
20	Question Image	
21	Question Image	
22	Question Image	A. 0 B. 1 C. 2 D. None of these
23	Which of the following is a factor of $x^3 - 3x^2 + 2x - 6$	A. x + 2 B. x + 3 C. x - 3 D. x - 4
24	Find a if 1 is a root of the equation $x^2 + ax + 2 = 0$	A. 3 B. -3 C. 2 D. 0
25	If x - 2 is a factor of ax2- 12x + a = 2a, then a = _____	A. -5 B. 5 C. 0 D. 1
26	If $x^2 - 7x + a$ has remainder 1 when divided by x + 1, then a = _____	A. -7 B. 7 C. 0 D. None of these
27	Two quadratic equation in which xy term is missing and the coefficients of x^2 and y^2 are equal, give a linear equation by _____	A. Addition B. Subtraction C. Multiplication D. Division
28	The polynomial x - a is a factor of the polynomial f(x) if and only if	A. f(a) is positive B. f(a) is negative C. f(a) = 0 D. None of these
29	The product of the four fourth roots of unity is	A. 0 B. 1 C. -1 D. None of these
30	Question Image	