Mathematics ECAT Pre Engineering Chapter 6 Quadratic Equations Online Test

Sr	Questions	Answers Choice
1	$w^{28}+ w^{38}=$ _____	A. 0 B. 1 C. w D. -1
2	(x +a)(x +b)(x +c)(x +) = k, k≠0 is reducible to quadratic form only if	A. a+b=c+d B. a+c=b+d C. a+d=b+c D. All are correct
3	Which of the following is factor of p(x) =2x3 +3x2+3x+2 ?	A. x+1 B. 2x+1 C. 3x+1 D. 2x-1
4	Question Image	
5	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
6	Roots of the equation $9x^2$- 12x + 4 = 0 are	A. Real and equal B. Real and distinct C. Complex D. None of these
7	In a quadratic equation with leading co-efficient 1, a student reads the co-obtain the roots as - 15 and -4. The correct roots are	A. 6, 10 B. -6, -10 C. 8, 8 D. -8, -8
8	Consider the equation px2 + qx + r = 0 where p,q,r are real The roots are equal in magnitude but opposite in sign when	A. q = 0, r = 0,p ≠ 0 B. p = 0,qr≠ 0 C. r = 0,pq≠ 0 D. q = 0, pq≠ 0
9	The roots of the equation 4x - 3.2x+2 + 32 = 0 would include	A. 1 and 3 B. 1 and 4 C. 1 and 2 D. 2 and 3
10	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
11	if one root of the equation ix2 - 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
12	The maximum value of the quadratic function f(x) = -2x2+20x,is	A. 4 B. 3 C. 50 D. 7
13	The solution of equation x2 + 2 = 0 in the set of real number is	A. Infinite set B. Singleton set C. Null set D. None of these
14	Question Image	A. (-1, 2) B. (-1, 1) C. (1, 2) D. {-1}
15	There are _____ basic techniques for solving a quadratic equation	A. Two B. Three C. Four D. None of these
16	The condition for polynomial equation ax^2+ bx + c = 0 to be quadratic is	A. Reciprocal equation

17	$x^4 - 3x^3 + 3x + 1 = 0$ is called _____	A. Reciprocal equation B. Exponential equation C. Radical equation D. None of these
18	Question Image	
19	Question Image	A. Reciprocal equation B. Exponential equation C. Radical equation D. None of these
20	The roots of the equation will be irrational if $b^2 - 4ac$ is	A. Positive and perfect square B. Positive but not a perfect square C. Negative D. Zero