ECAT (Pre-Eng) Mathematics Chapter 6 Quadratic Equations

Sr	Questions	Answers Choice
1	If x - 1 is a factor of x4 - 5x2 + 4 then other factor is	A. (x + 2)2(x - 1) B. (x + 2)(x - 1)2 C. (x+2)(x2- x- 2) D. (x + 2)2(x - 1)2
2	Question Image	A. 0 B. 1 C. 2 D. 3
3	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
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 solution of the quadratic equation x2 -7x + 10=0, is	A. 2 B. 5 C. 2,5 D. 7
6	In quadratic equation, if the replacement of y with -y leaves the equation unchanged, then the graph is	A. Straight line B. Circle C. Hyperbola D. Symmetric w.r.t.0
7	Roots of the equation $2x^2- 7x + 3 = 0$ are	A. Rational B. Irrational C. Complex D. None of these
8	The condition for polynomial equation $ax^2+ bx + c = 0$ to be quadratic is	
9	If ax + bx + c =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
10	$w^{28}+ w^{38}=$ _____	A. 0 B. 1 C. w D. -1
11	A quadratic equation has two	A. roots B. degree C. variables D. constants
12	The roots of (b-c)x2+(c-a) x+a-b=0 are equal if	A. 2b = a+c B. 2a = b+c C. 2c = a+b D. a + b + c =0
13	Question Image	
14	The vertex of the graph of the quadratic function f(x) =-x2+6x+1,is	A. (-3,10) B. (-3,-10) C. (3,10) D. (3,-10)
15	Question Image	A. 1 B. 2 C. 0 D. 4
16	The product of the four fourth roots of unity is	A. 0 B. 1 C. -1 D. None of these

17	Question Image	A. -1 B. 0 C. 2 D. 1
18	Roots of the equation $x^2 + 2x + 3 = 0$ are	A. Real and equal B. Real and distinct C. Complex D. None of these
19	Roots of the equation $x^2 - x = 2$ are	A. {2, -1} B. {1, 0} C. {2, 1} D. {-2, 1}
20	$w^4 =$ _____	A. 0 B. 1 C. w D. w²