ECAT (Pre-Eng) Mathematics Chapter 6 Quadratic Equations

Sr	Questions	Answers Choice
1	The minimum value of the quadratic function f(x) = 5 x 2-11,is	A. -11 B. 6 C. -7 D. 7
2	For any integer k, w^n= _____ when n = 3k	A. 1 B. 2 C. 0 D. -4
3	The synthetic division method is only used to divide a polynomial by	A. quadratic equation B. binomial C. linear equation D. monomial
4	Roots of the equation x^2+ 7x + 12 = 0 are	A. {3, -4} B. {-3, 4} C. {3, 4} D. {-3, -4}
5	Which of the following is factor of x11+a11, where n is an odd integer	A. x-a B. x+a C. 2x-a D. 2x+a
6	Question Image	A. Reciprocal equation B. Exponential equation C. Radical equation D. None of these
7	Each complex cube root of unity is square of	A. itself B. 1 C. -1 D. the other
8	The positive value of k for which the equation x2 + kx + 64 = 0 has one of the roots 0	A. 4 B. 64 C. 8 D. All values of k
9	The product of the four fourth roots of unity is	A. 0 B. 1 C. -1 D. None of these
10	For the equation $\|x^2\|$ + |x| -6 =0, the roots are	A. One and only one real number B. Real with sum one C. Real with sum zero D. Real with product zero
11	Question Image	
12	In quadratic equation $y=ax^3$ +bx+c, if b and c are both zero then the graph is	A. Symmetric w.r.t.y-axis B. Symmetric w.r.t.x-axis C. Straight Line D. Circle
13	The maximum value of the quadratic function f(x) = 2x2-4x+7,is	A. 3 B. 5 C. -3 D. -5
14	If the roots of ax^2- bx - c = 0 change by the same quantity, then the expression in a, b, c that does not change is	
15	Roots of the equation $2x^2$- 7x + 3 = 0 are	A. Rational B. Irrational C. Complex D. None of these
16	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

17	If a polynomial p(x) is divided by x-c, then the remainder is	A. p(x) B. x-c C. c D. P(c)
18	The value of k (k > 0) for which the equation x^2+ kx + 64 = 0 and x^2- 8x + k = 0 both will have real roots is	A. 8 B. -16 C. -64 D. 16
19	If w is a cube root of unity then 1 + w + w^2= _____	A. 1 B. 2 C. 0 D. -1
20	If x^3- x^2+ 5x+ 4 is divided by x - 2, then the reminder is	A. 0 B. 2 C. 18 D. 14