ECAT Mathematics Chapter 6 Quadratic Equations

Sr	Questions	Answers Choice
1	Question Image	A. n if n is even B. 0 for any natural number n C. 1 if in odd D. None of these
2	The product of cube roots of unity is	A. Zero B. 1 C. -1 D. None of these
3	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
4	Ifα,β are non-real roots of ax2 + bx +c =0 (a,b,c∈ Q),then	A. α = β B. αβ = 1 C. α = β D. α = 1
5	The roots of (x - a)(x - b) = ab x2 are always	A. Real B. Depends upon a C. Depends upon b D. Depends upon a and b
6	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
7	Roots of the equation $2x^2$- 7x + 3 = 0 are	A. Rational B. Irrational C. Complex D. None of these
8	w^{73}= _____	A. 0 B. 1 C. w D. w²
9	Question Image	A. -1 B. 0 C. 2 D. 1
10	A quadratic equation has two	A. roots B. degree C. variables D. constants
11	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
12	w^4= _____	A. 0 B. 1 C. w D. w²
13	Roots of the equation x^2+ 5x - 1 = 0 are	A. Rational B. Irrational C. Complex D. None of these
14	If the roots of 3x2+kx + 12 = 0 are equal then k = _____	
15	(2 + w) (2 + w^2) = _____	A. 1 B. 2 C. 3 D. 0
16	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	

17	If a parabola opens down, then its vertex is at the	A. Right of the parabola B. Left of parabola C. Lowest point on the parabola D. Highest point on the parabola
18	Root of the equation $3^{x-1} + 3^{1-x} =$ is	A. 2 B. 1 C. 0 D. -1
19	The roots of the equation $2^{2x} - 10.2^{x} + 16 = 0$ are	A. 2, 8 B. 1, 3 C. 1, 8 D. 2, 3
20	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