ECAT (Pre-Eng) Mathematics Chapter 6 Quadratic Equations

Sr	Questions	Answers Choice
1	w^{11}= _____	A. 0 B. 1 C. w D. w²
2	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
3	Question Image	A. n if n is even B. 0 for any natural number n C. 1 if in odd D. None of these
4	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
5	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
6	The maximum value of the quadratic function f(x) = 2x2-4x+7,is	A. 3 B. 5 C. -3 D. -5
7	Question Image	A. Two real roots B. Two positive roots C. Two negative roots D. One positive and one negative root
8	The vertex of the graph of the quadratic function f(x) = x2 -10, is	A. (0 , -10) B. (-10,0) C. (10,0) D. (0,10)
9	Roots of the equation $x^2 - x = 2$ are	A. {2, -1} B. {1, 0} C. {2, 1} D. {-2, 1}
10	If α, β are the roots of $ax^2 + bx + c = 0$ and $\alpha + h, \beta + h$ are the roots of $px^2 + qx + r=0$, then h =	
11	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
12	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
13	$4^{1+x} + 4^{1-x} = 10$ is called	A. Reciprocal equation B. Exponential equation C. Radical equation D. None of these
14	A polynomial of arbitrary degree	A. f(x) = o B. f(x) = x C. f(x) = a D. f(x) = ax + b,a ≠ 0
15	The roots of px2 - (p-q)x-q=0 are	A. equal B. Irrational C. Rational D. Imaginary
		A. 1

16	For any integer k, w^n= _____ when n = 3k	B. 2 C. 0 D. -4
17	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
18	The condition for ax2 + bx c to be expressed as the product of linear polynomials is	A. b4 - 4ac =0 B. b4- 4ac ≥0 C. b4- 4ac <0 D. b4= 4ac
19	If the roots of ax2 + b =0 are real and distinct then	A. ab > 0 B. a = 0 C. ab < 0 D. a > 0,b > 0
20	Question Image	