ECAT Mathematics Chapter 6 Quadratic Equations

Sr	Questions	Answers Choice
1	If a,βare the roots of the equation x2 - 8x + p = 0 and a2 + β2= 40,then value of p is	A. 8 B. 12 C. 10 D. 14
2	w^{29}= _____	A. 0 B. 1 C. w D. w²
3	Question Image	A. 2 B. 4 C. 8 D. 16
4	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
5	Another name of quadratic equation is	A. Polynomial B. 2nd degree polynomial C. Linear equation D. simaltaneous equations
6	The maximum value of the quadratic function f(x) = -2x2+20x,is	A. 4 B. 3 C. 50 D. 7
7	The quadratic formula is	
8	Question Image	A. 1 B. 2 C. 0 D. 4
9	(1+w)(1+w2)(1+w4)(1+w8)....50 factors	A. 0 B. -1 C. 1 D. 2
10	4^{1+x}+ 4^{1-x}= 10 is called	A. Reciprocal equation B. Exponential equation C. Radical equation D. None of these
11	The product of cube roots of unity is	A. Zero B. 1 C. -1 D. None of these
12	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
13	The roots of ax2+bx+c=0 are	A. Rational ⇔ b2 -4 ac ≥ 0 B. Irrational ⇔ b2-4 ac > 0 C. Real ⇔ b2-4 ac ≠ 0 D. Rational⇔ b2-4 ac = 0
14	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
15	If w is a cube root of unity then 1 + w + w^{2}= _____	A. 1 B. 2 C. 0 D. -1
16	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
17	If the roots of 3x2+kx + 12 = 0 are equal then k = _____	
18	A quadratic equation has two	A. roots B. degree C. variables D. constants
19	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
20	Question Image	A. Only one real solution B. Exactly three real solution C. Exactly one rational solution D. Non-real roots