Mathematics ECAT Pre Engineering Chapter 6 Quadratic Equations Online Test

Sr	Questions	Answers Choice
1	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
2	The value of x for which the polynomials x2 - 1 and x2 -2x + 1 vanish simultaneously is	A. 2 B. 1 C. -1 D. -2
3	In quadratic equation $f(x) = ax^2$,if a >0, then the graph of parabola	A. Opens up B. Opens down C. close up D. symmetric w.r.t.x.axis
4	The graph of a quadratic function is	A. Circle B. Ellipse C. Parabola D. Hexagon
5	If b^2- 4ac is positive then the roots of the equation are	A. Real B. Imaginary C. Positive D. Negative
6	If ax^2+ bx + x = 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
7	If b^2- 4ac = 0 then the roots of the equation are	A. Real and distinct B. Real and equal C. Imaginary D. None of these
8	Root of the equation $3^{x-1}+ 3^{1-x}=$ is	A. 2 B. 1 C. 0 D. -1
9	Roots of the equation x^2+ 2x + 3 = 0 are	A. Real and equal B. Real and distinct C. Complex D. None of these
10	Question Image	A. n if n is even B. 0 for any natural number n C. 1 if in odd D. None of these
11	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
12	The condition for polynomial equation ax2 + bx + c = 0 to be quadratic is	A. a > 0 B. a < 0 C. a≠ 0 D. a≠ 0,b ≠ 0
13	$w^{-1}=$ _____	A. 0 B. 1 C. w D. w²
14	$w^4=$ _____	A. 0 B. 1 C. w D. w²
15	If $f(x) = ax^2$, and a>0, then the lowest point on the parabola is called.	A. Vertex of parabola B. Co-ordinates of parabola C. Roots of the equation D. Coefficient of the equation

16	In a quadratic equation with leading co-efficient 1, a student reads the co-obtain the roots as - 15 and -4. The correct roots are	A. 6, 10 B. -6, -10 C. 8, 8 D. -8, -8
17	A quadratic equation in x is an equation that can be witten in the form	A. ax²+ b = 0 B. ax³ +b²+c=0 C. ax² +bx+c=0 D. ax³ +bx³+cx=0
18	w^{15}= _____	A. 0 B. 1 C. w D. w²
19	Question Image	A. 1 B. -1 C. 5 D. 2
20	If x - 2 is a factor of ax2- 12x + a = 2a, then a = _____	A. -5 B. 5 C. 0 D. 1