

Mathematics ECAT Pre Engineering Chapter 6 Quadratic Equations Online Test

C-	Overtions	Anguaga Chair-
Sr	Questions	Answers Choice
1	If the roots of 3x2+kx + 12 = 0 are equal then k =	
2	Only one of the root of $ax^2 + bx + c = 0$, $a \ne 0$ is zero if	A. $c = 0$ B. $c = 0,b\neq 0$ C. $b = 0,c = 0$ D. $b = 0,c\neq 0$
3	x^4 - $3x^3$ + $3x$ + 1 = 0 is called	A. Reciprocal equation B. Exponential equation C. Radical equation D. None of these
4	The roots of px2 - (p-q)x-q=0 are	A. equal B. Irrational C. Rational D. Imaginary
5	Find a if 1 is a root of the equation x^2 + ax + 2 = 0	A. 3 B3 C. 2 D. 0
6	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. $q = 0$, $r = 0$, $p \neq 0$ B. $p = 0$, $qr \neq 0$ C. $r = 0$, $pq \neq 0$ D. $q = 0$, $pq \neq 0$
7	If ax + bx + c =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
8	w ⁻¹ =	A. 0 B. 1 C. w D. w ²
9	w ¹² =	A. 0 B. 1 C. w D. w ²
10	$(2 + w) (2 + w^2) =$	A. 1 B. 2 C. 3 D. 0
11	If x^4 - $10x^2$ - $2x + 4$ is divided by $x + 3$, then the reminder is	A. 1 B. 0 C. 4 D. None of these
12	w ⁷³ =	A. 0 B. 1 C. w D. w ²
13	Question Image	A. 15 B. 9 C. 7 D. 8
14	If the roots of x^2 + ax + b = 0 are non-real, then for all real x, x^2 + ax + b is	A. Negative B. Positive C. Zero D. Nothing can be said
15	The condition for polynomial equation $ax^2 + bx + c = 0$ to be quadratic is	A. a > 0 B. a < 0 C. a≠ 0 D. a≠ 0,b ≠ 0
16	If $2x^{1/3} + 2x^{1/3} = 5$, then x is equal to	A. 1 or -1 B. 2 or 1/2 C. 8 or 1/8

7	If the roots of ax^2 - bx - c = 0 change by the same quantity, then the expression in a, b, c the does not change is	at
8	(1+w)(1+w2)(1+w4)(1+w8)50 factors	A. 0 B1 C. 1 D. 2
9	Each complex cube root of unity is square of	A. itself B. 1 C1 D. the other
:0	The value of x for which the polynomials $x^2 - 1$ and $x^2 - 2x + 1$ vanish simultaneously is	A. 2 B. 1 C1 D2