

ECAT (Pre-Eng) Mathematics Chapter 6 Quadratic Equations

Sr	Questions	Answers Choice
1	Another name of quadratic equation is	A. Polynomial B. 2nd degree polynomial C. Linear equation D. simultaneous equations
2	Only one of the root of $ax^2 + bx + c = 0$, $a \neq 0$ is zero if	A. $c = 0$ B. $c = 0, b \neq 0$ C. $b = 0, c = 0$ D. $b = 0, c \neq 0$
3	The equation $(\cos p - 1)x^2 + x(\cos p) + \sin p = 0$ in the variable x, has real roots, then p can take any value in the interval	A. $(0, 2\pi)$ B. $(-\pi, 0)$ C. $(0, \pi)$ D. None of these
4	Question Image	
5	Question Image	A. Polynomial of degree 0 B. Polynomial of degree 2 C. Quadratic equation D. None of these
6	If $x - 1$ is a factor of $x^4 - 5x^2 + 4$ then other factor is	A. $(x + 2)^2(x - 1)$ B. $(x + 2)(x - 1)^2$ C. $(x+2)(x^2 - x - 2)$ D. $(x + 2)^2(x - 1)^2$
7	The quadratic equation $8 \sec^2 \theta - 6 \sec \theta + 1 = 0$ has	A. Infinitely many roots B. Exactly two roots C. Exactly four roots D. No roots
8	Question Image	
9	The graph of a quadratic function is	A. Circle B. Ellipse C. Parabola D. Hexagon
10	If α, β are the roots of the equation $x^2 - 8x + p = 0$ and $\alpha^2 + \beta^2 = 40$, then value of p is	A. 8 B. 12 C. 10 D. 14
11	Question Image	
12	The condition for polynomial equation $ax^2 + bx + c = 0$ to be quadratic is	
13	The maximum value of the quadratic function $f(x) = 2x^2 - 4x + 7$, is	A. 3 B. 5 C. -3 D. -5
14	The cube roots of 8 are	
15	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

16 If $x^4 - 10x^2 - 2x + 4$ is divided by $x + 3$, then the remainder is

A. 1
B. 0
C. 4
D. None of these

17 Root of the equation $3^{x-1} + 3^{1-x} =$ is

A. 2
B. 1
C. 0
D. -1

18 $w^{12} =$ _____

A. 0
B. 1
C. w
D. $w^{²}$

19 Roots of the equation $2x^2 - 7x + 3 = 0$ are

A. Rational
B. Irrational
C. Complex
D. None of these

20 the largest degree of the terms in the polynomials is called

A. terms of the polynomial
B. degree of a polynomial
C. co-efficient
D. monomial
