ECAT Mathematics Chapter 6 Quadratic Equations

Sr	Questions	Answers Choice
1	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
2	A polynomial P(x)has a factor (x-a)if P(a) =	A. a B. x C. 1 D. 0
3	The roots of px2 - (p-q)x-q=0 are	A. equal B. Irrational C. Rational D. Imaginary
4	A quadratic equation has two	A. roots B. degree C. variables D. constants
5	In quadratic equation $y=ax^3+bx+c$, if b and c are both zero then the graph is	A. Symmetric w.r.t.y-axis B. Symmetric w.r.t.x-axis C. Straight Line D. Circle
6	If a polynomial p(x) is divided by x-c, then the remainder is	A. p(x) B. x-c C. c D. P(c)
7	If $\sin\alpha$ and $\cos\alpha$ are the roots of the equation $px^2+ qx + r =0$, then	A. p²- q²+ 2pr = 0 B. (p + r)²= q²- r² C. p²+ q²- 2pr = 0 D. (p - r)²= q²+ r²
8	$w^4=$ _____	A. 0 B. 1 C. w D. w²
9	The product of cube roots of unity is	A. Zero B. 1 C. -1 D. None of these
10	Question Image	A. 2 B. 4 C. 8 D. 16
11	The maximum value of the quadratic function f(x) = 2x2-4x+7,is	A. 3 B. 5 C. -3 D. -5
12	The solution of equation x2 + 2 = 0 in the set of real number is	A. Infinite set B. Singleton set C. Null set D. None of these
13	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
14	Question Image	A. c/a B. -c/a C. b/a D. -b/a

15	w^{29}= _____	A. 0 B. 1 C. w D. w²
16	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
17	If $b^2 - 4ac$ is positive then the roots of the equation are	A. Real B. Imaginary C. Positive D. Negative
18	The product of the four fourth roots of unity is	A. 0 B. 1 C. -1 D. None of these
19	Roots of the equation $2x^2 - 7x + 3 = 0$ are	A. Rational B. Irrational C. Complex D. None of these
20	w^{15}= _____	A. 0 B. 1 C. w D. w²