ECAT Mathematics Chapter 6 Quadratic Equations

Sr	Questions	Answers Choice
1	A polynomial of arbitrary degree	A. f(x) = o B. f(x) = x C. f(x) = a D. f(x) = ax + b,a ≠ 0
2	If x-2 and x-1 both are factors of x^3-3x^3+2x-4p, then P must equal to	A. 1 B. 2 C. 0 D. -2
3	If one root of the equation x^2- 3x + a = 0 is 2 then a = _____	A. 0 B. 1 C. 2 D. 3
4	The two parts into which 57 should be divided so that their product is 782 are	A. 43,14 B. 34,23 C. 33,24 D. 44,13
5	If$\alpha,\beta$are the roots of ax^2+ bx + c = 0 andα+ h,β+ h are the roots of px^2+ qx + r=0, then h =	
6	Question Image	A. 1 B. 2 C. 0 D. 4
7	If x - 2 is a factor of ax2- 12x + a = 2a, then a = _____	A. -5 B. 5 C. 0 D. 1
8	Roots of the equation $2x^2$- 7x + 3 = 0 are	A. Rational B. Irrational C. Complex D. None of these
9	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
10	The roots of px2 - (p-q)x-q=0 are	A. equal B. Irrational C. Rational D. Imaginary
11	Ifα,β are non-real roots of ax2 + bx +c =0 (a,b,c∈ Q),then	A. α = β B. αβ = 1 C. α = β D. α = 1
12	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
13	Question Image	A. 2 B. 4 C. 8 D. 16
14	Sum of all the four forth roots of unity is	A. 1 B. -1 C. i D. 0
15	Question Image	A. Two real roots B. Two positive roots C. Two negative roots D. One positive and one negative root
		A. 0

16	w^{15}= _____	B. 1 C. w D. w²
17	Which of the following is factor of p(x) =2x3 +3x2+3x+2 ?	A. x+1 B. 2x+1 C. 3x+1 D. 2x-1
18	The vertex of the graph of the quadratic function f(x) = x2 -10, is	A. (0 , -10) B. (-10,0) C. (10,0) D. (0,10)
19	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
20	If the roots of ax^2+ bx + c = 0 (a > 0) be greater than unity, then	A. a + b + c = 0 B. a + b + c > 0 C. a + b + c < 0 D. None of these