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	If the equation x2+2x-3=0 and x2+3x-k=0 have a common root then the non - zero value of k is	A. 1 B. 3 C. 2 D. 4
3	If one root of 5x2 + 13x + k = 0 be the reciprocal of the other root the value of k is	A. 0 B. 2 C. 1 D. 5
4	The product of the four fourth roots of unity is	A. 0 B. 1 C. -1 D. None of these
5	The graph of the quadratic equation is	A. Straight line B. Circle C. Parabola D. elipse
6	Find a if 1 is a root of the equation x^2+ ax + 2 = 0	A. 3 B. -3 C. 2 D. 0
7	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
8	Roots of the equation x^2+ 7x + 12 = 0 are	A. {3, -4} B. {-3, 4} C. {3, 4} D. {-3, -4}
9	Roots of the equation $2x^2$- 7x + 3 = 0 are	A. Rational B. Irrational C. Complex D. None of these
10	Another name of quadratic equation is	A. Polynomial B. 2nd degree polynomial C. Linear equation D. simaltaneous equations
11	If α, β are the roots of ax^2+ bx + c = 0 and α+ h, β+ h are the roots of px^2+ qx + r=0, then h =	
12	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 ≠ 0 B. p = 0,qr≠ 0 C. r = 0,pq≠ 0 D. q = 0, pq≠ 0
13	The vertex of the graph of the quadratic function f(x) =-x2+6x+1,is	A. (-3,10) B. (-3,-10) C. (3,10) D. (3,-10)
14	For any integer k, w^n= _____ when n = 3k	A. 1 B. 2 C. 0 D. -4
15	If x^3- x^2+ 5x+ 4 is divided by x - 2, then the reminder is	A. 0 B. 2 C. 18 D. 14
16	A polynomial of arbitrary degree	A. f(x) = o B. f(x) = x

		C. f(x) = a D. f(x) = ax + b,a ≠ 0
17	A quadratic equation has two	A. roots B. degree C. variables D. constants
18	Question Image	A. c/a B. -c/a C. b/a D. -b/a
19	Which of the following is factor of x11+a11, where n is an odd integer	A. x-a B. x+a C. 2x-a D. 2x+a
20	If x^2 + px + 1 is a factor of ax^3+ bx +c, then	A. a²+ c²= -ab B. a²- c²= -ab C. a²- c²= ab D. None of these