ECAT (Pre-Eng) Mathematics Chapter 6 Quadratic Equations

Sr	Questions	Answers Choice
1	If a parabola opens down, then its vertex is at the	A. Right of the parabola B. Left of parabola C. Lowest point on the parabola D. Highest point on the parabola
2	The expression x2 - x + 1 has	A. One proper linear factor B. No proper linear factor C. Two proper linear factors D. None of these
3	If $3x^4 + 4x^3 + x - 5$ is divided by x + 1, then the reminder is	A. 0 B. 7 C. -7 D. 5
4	Question Image	
5	Question Image	A. (-1, 2) B. (-1, 1) C. (1, 2) D. {-1}
6	A polynomial P(x)has a factor (x-a)if P(a) =	A. a B. x C. 1 D. 0
7	The cube roots of 8 are	
8	Question Image	A. n if n is even B. 0 for any natural number n C. 1 if in odd D. None of these
9	If the roots of 3x2+kx + 12 = 0 are equal then k = _____	
10	A quadratic equation has two	A. roots B. degree C. variables D. constants
11	The solution set of $x^2 - 5x + 6 = 0$ is	A. {1, 3} B. {2, 3} C. {1, 2} D. None of these
12	Question Image	
13	Question Image	A. 1 B. 2 C. 0 D. 4
14	Question Image	A. (a - c)²= b²- c² B. (a - c)²= b²+ c² C. (a + c)²= b²- c² D. (a + c)²= b²+ c²
15	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
16	If $x^3 - x^2 + 5x + 4$ is divided by x - 2, then the reminder is	A. 0 B. 2 C. 18 D. 14
17	Question Image	

18	If a polynomial P(x) is divided by x + a, then the remiander is	A. P(a) B. P(-a) C. P(0) D. None of these
19	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
20	Only one of the root of ax2 + bx + c =0, a≠ 0 is zero if	A. c = 0 B. c = 0,b≠ 0 C. b = 0,c = 0 D. b = 0,c≠ 0