ECAT Pre Engineering Entry Test

Sr	Questions	Answers Choice
1	QUQ'	
2	Question Image	A. Set of whole number B. Rational Numbers C. Complex numbers D. Whole numbers
3	The set {1, 2, 3, 4, ...} is called	A. Set of Natural numbers B. Set of whole numbers C. Set of rational number D. Set of irrational numbers
4	Geometrically, the modulus of a complex number represents its distance from the	A. Point (1, 0) B. Point (0, 1) C. Point (1, 1) D. Point (0, 0)
5	Question Image	
6	The multiplicative inverse of 1 - 2i is	
7	The square root of 2i - 20i is	A. +-(5 - 2i) B. +-(5 + 2i) C. (5 - 2i) D. None of these
8	The value of x, and y, when $(x + iy)^2 = 5 + 4i$	A. X = 2, y = 1 B. X = -2, y = 1 C. X = 2, y = -1 D. X = 2, y = 2
9	Question Image	A. -3 -2i B. 3 +2i C. 1 + 2i D. 1 - 2i
10	What is the conjugate of -7 -2i?	A. -7 + 2i B. 7 + 2i C. 7 -2i D. None of these
11	Question Image	
12	The equation $\|x + 4\| = x$ has solution	A. x = -2 B. x = 2 C. x = -4 D. x = 4
13	The solution set of the equation $\|3x + 2\| = 5$ is	
14	Question Image	A. 15 B. 15 i C. -15 i D. -15
15	If $Z_1 = 1 + i$, $Z_2 = 2+3i$, then $\|Z_2 - Z_1\| = ?$	
16	If Z = (1,2), then $Z^{-1} = ?$	A. (0.2, 0.4) B. (-0.2, 0.4) C. (0.2, -0.4) D. (-0.2, -0.4)
17	The value of x, and y, when $(x + iy)^2 = 5 + 4i$	A. X = 2, y = -1 B. X = -2, y=1 C. X = 2, y = -1 D. X = 2, y = 2
18	Question Image	A. A positive integer B. A negative integer C. A natural number D. An irrational number
		A. Rational number

19	Every prime number is also	B. Even number C. Irrational number D. Multiple of two numbers
20	3/2 is	A. An irrational number B. Whole number C. A positive integer D. A rational number
21	Question Image	A. A rational number B. A irrational number C. An even integer D. A factor of 36
22	6 is	A. A prime integer B. An irrational number C. A rational number D. An odd integer
23	Zero is	A. An irrational number B. A rational number C. A negative integer D. A positive number
24	If the angle between two vectors with magnitude 2 and 15 is 30°then their scalar product is	B. 15 C. 30
25	Question Image	A. 12 B. 6 C. 8 D. none of these
26	Question Image	
27	Question Image	
28	Question Image	
29	Question Image	
30	Question Image	