ECAT Mathematics Chapter 1 Number System Online Test

Sr	Questions	Answers Choice
1	Question Image	A. A complex number B. A rational number C. A natural number D. An irrational number
2	Decimal part of irrational number is	A. Terminating B. Repeating only C. Neither repeating nor terminating D. Repeating and terminating
3	Multiplicative inverse of 0 is	A. 0 B. 1 C. ±1 D. Does not exist
4	The identity element with respect to subtraction is	A. 0 B. 1 C. -1 D. Does not exist
5	If A = {x / x ∈ R ∧ x^2 - 16 = 0} then A =	A. - x B. Infinite set C. Φ D. {-4,4}
6	Additive inverse of - a - b is	A. a B. -a + b C. a - b D. a + b
7	If a set S contains n elements then P (S) has ..... number of elements	A. 2ⁿ B. 2ⁿ² C. 2.n D. n²
8	Total number of subsets that can be formed out of the set {a,b,c} is	A. 1 B. 4 C. 8 D. 12
9	In set builder notation the set {0,1,2,.....100} can be written as	A. {x / xε B ∧ x ≤ 100} B. {x / x ∈ W ∧ x < 101} C. {x / x ∈ Z ∧ x < 101} D. The set of first 100 whole numbers
10	Multiplicative inverse of "1" is	A. 0 B. ±1 C. 1 D. {0,1}
11	√(-1b) =?	A. b i B. -i b C. b2 D. i√b
12	What is the conjugate of -6 -i	A. -6 +i B. 6 + i C. -6 -i D. 6 -i
13	Which element is the additive inverse of (a,b) in Complex numbers	A. (a,0) B. (0,b) C. (a,b) D. (-a,-b)
14	If Z_1 = 1+ i, Z_2 = 2+3i , then $\|Z_1 - Z_2\|$ =?	A. √5 B. √7 C. -1-2i D. √3
15	i^{101} =	A. i B. i² C. -i

		D. -1
16	The polar form of complex number x ≠ I y =	A. r cos θ+ r sin θ B. r cos θ+ is sin θ C. cos θ+ r sin θ D. i cos θ+ i sin θ
17	(7,9) +(3,-5) =	A. (4,4) B. (10,4) C. (9,-5) D. (7,3)
18	√-1 b=	A. b B. 2 C. 2b D. None of these
19	i^9 =	A. i² B. -1 C. 1 D. i
20	i^2 =	A. 1 B. 2 C. -1 D. 0
21	(a,0) x (c,0) =	A. (0,ac) B. (ac,0) C. (0,0) D. (a,c)
22	(a,b) +(-a,-b) =	A. (0,0) B. (a,b) C. (-a,-b) D. (1,1)
23	The conjugate of √5 *i* is	A. √5 B. -√5 i C. i D. 5i
24	(a +b*i*) -c (c +d*i*) =	A. (a +b) = (c +d) B. (a +c) + i(b +d) C. (a -c) + (c -d)i D. (a -c) +(b -d) i
25	i^3 =	A. -1 B. i C. -i D. 1
26	In (x +iy) y is called as	A. Imaginary part B. Complex number C. Real part D. None of above
27	In (x + iy) x is the known as	A. Imaginary part of complex number B. Real part of complex number C. Complex number D. None of above
28	*i* =	A. √1 B. √2 C. √-2 D. √-1
29	The property used in -3 <-2 ⇒0 <1	A. Commutative property B. Additive property of inequality C. Additive inverse D. Additive identity
30	(√3+√5)+√7 = √3 +(√5 +√7) property used in above is	A. Commutative property of addition B. Closure property of addition C. Additive inverse D. Associative property w.r.t to adition