ECAT (Pre-Eng) Mathematics For Chapter 1 Number System

Sr	Questions	Answers Choice
1	2/9,5/7∈ R,(2⎪9)(5⎪7)=10/63∈R this property is called	A. Associative property B. Identity property C. Commutative property D. Closure property w.r.t multiplication
2	The identity element with respect to subtraction is	A. 0 B. -1 C. 0 and 1 D. None of thes
3	Question Image	
4	Question Image	A. A prime number B. An integer C. A whole number D. An irrational number
5	Question Image	D. None of these
6	∀x, y ∈ R, either x = y or x > y or x < y is	A. Transitive property B. Reflexive property C. Trichotomy property D. None of these
7	¡^{101} =	A. i B. i² C. -i D. -1
8	Question Image	A. Trichotomy property B. Additive property of inequality C. Transitive property D. Multiplicative property
9	In R, the multiplicative identity is	A. 0 B. 1 C. -1 D. None
10	Multiplicative inverse of "1" is	A. 0 B. ±1 C. 1 D. {0,1}
11	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
12	Question Image	
13	Question Image	
14	If Z_1= 1 + i, Z_2= 2+3i, then $\|Z_2 - Z_1\|$ = ?	
15	Question Image	
16	The conjugate of √5 *i* is	A. √5 B. -√5 i C. i D. 5i
17	If z=(x,y) then z has no multiplicative inverse when	A. x ≠ 0, y = 0 B. x = 0, y = 0 C. x = 0, y ≠ 0 D. None of these
18	A prime number can be a factor of a square only if it occurs in the square at least	A. Once B. Thirce C. Twice D. None of these

19	i^2 =	A. 1 B. 2 C. -1 D. 0
20	$a.a^{-1} = a^{-1}.a = 1$ is a	A. Commutative law of multiplication B. Multiplicative identity C. Associative law of multiplication D. Multiplicative inverse