

## ECAT Mathematics Chapter 1 Number System

Sr	Questions	Answers Choice
1	Question Image	A. A rational number B. A natural number C. An irrational number D. An integer
2	The set $\{0,-1\}$ hold closure property under	A. Addition B. Both a & c C. Multiplication D. None of these
3	Question Image	A. Additive property in R B. Multiplication property in R C. Cancellation property in R D. Distribution property in R
4	Question Image	A. are real no B. both are not real C. are imaginary no D. both are imaginary
5	$a \cdot a^{-1} = a^{-1} \cdot a = 1$ is a	A. Commutative law of multiplication B. Multiplication identity C. Associative law of multiplication D. Multiplication inverse
6	$\forall a, b, c \in R, a + c = b + c \Rightarrow a = b$	A. Reflexive property B. Symmetric property C. Cancellations property w.r.t. addition D. Transitive property
7	Question Image	
8	The set $\{1, 2, 3, 4, \dots\}$ is called	A. Set of Natural numbers B. Set of whole numbers C. Set of rational number D. Set of irrational numbers
9	If $z_1 = 1 + 2i, z_2 = 3 + 4i$ then	A. $z_1 > z_2$ B. $z_1 = z_2$ C. $z_1 < z_2$ D. None of these
10	$i^9 =$	A. $i^2$ B. -1 C. 1 D. i
11	Rational number is a number which can be written as a terminating decimal fraction or a	A. Non-terminating decimal fraction B. Non-recurring C. Recurring decimal fraction D. a, b and c
12	24 can be written as a product of	A. Odd factors B. Even factors C. Whole factors D. Prime factors
13	The identity element with respect to subtraction is	A. 0 B. -1 C. 0 and 1 D. None of thes
14	In $(x + iy)$ y is called as	A. Imaginary part B. Complex number C. Real part D. None of above
15	If $Z_1 = 1 + i, Z_2 = 2 + 3i$ , then $ Z_1 - Z_2  = ?$	

16 If  $0 \in \mathbb{R}$ , then the additive inverse of  $a$  is

- B.  $\frac{1}{-9}$
- C.  $a$
- D.  $-a$

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- A. A rational number
- B. A irrational number
- C. An even integer
- D. A factor of 36

18  $i^{(4n+2)} = \dots\dots\dots$

- A. 1
- B.  $i$
- C.  $-1$
- D.  $-i$

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- A. 0
- B. 1
- C.  $-1$
- D. None of these

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- A. Reflexive property
- B. Symmetric property
- C. Transitive property
- D. Additive property