

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

Sr	Questions	Answers Choice
1	Which of the following has the same value as i^{113} ?	A. i B. -1 C. $-i$ D. 1
2	Question Image	B. 1 D. -1
3	Question Image	
4	Union of the sets of rational and irrational numbers is called 6th set of	A. Natural numbers B. Real numbers C. Whole numbers D. Prime numbers
5	$i^2 =$	A. 1 B. 2 C. -1 D. 0
6	Question Image	A. 15 B. $15i$ C. $-15i$ D. -15
7	Question Image	
8	$a \cdot a^{-1} = a^{-1} \cdot a = 1$ is a	A. Commutative law of multiplication B. Multiplication identity C. Associative law of multiplication D. Multiplication inverse
9	Question Image	A. 0 B. 1 C. -1 D. None of these
10	Question Image	A. Principle of equality of Fractions B. Rule for product of fraction C. Golden rule of fraction D. Rule of quotient of Fraction
11	Every prime number is also	A. Rational number B. Even number C. Irrational number D. Multiple of two numbers
12	14 is not a	A. Prime number B. Whole number C. Even number D. Real number
13	If $A = \{x / x \in \mathbb{R} \wedge x^2 - 16 = 0\}$ then $A =$	A. $-x$ B. Infinite set C. \emptyset D. $\{-4, 4\}$
14	A non-terminating non_recurring decimal represents an	A. Irrational no B. Both a & c C. Rational no D. None of these
15	Question Image	A. 1 B. -1
16	In \mathbb{R} the number of identity elements w.r.t. ' \cdot ' is	A. One B. Two C. Three D. Four
17	In \mathbb{R} , the additive identity is	A. 0 B. 1 C. -1 D. None

18 $\forall x, y \in \mathbb{R}$ and $x < 0, y < 0$, which one is true

- A. $xy < 0$
- B. $xy = 0$
- C. $xy > 0$
- D. None of these

19 $i =$

- A. $\sqrt{1}$
- B. $\sqrt{2}$
- C. $\sqrt{-2}$
- D. $\sqrt{-1}$

20 The additive inverse of 0 is

- A. 1
- B. -1
- C. 0
- D. Does not exist