

## ECAT Mathematics Chapter 1 Number System

Sr	Questions	Answers Choice
1	If $Z_1 = 1 + i$ , $Z_2 = 2 + 3i$ , then $ Z_1 - Z_2  = ?$	
2	Question Image	
3	Question Image	
4	$\forall a, b \in \mathbb{R}$ , $ab = ba$ is a	A. Commutative law of multiplication B. Closure law of multiplication C. Associative law of multiplication D. Multiplicative identity
5	Question Image	A. Principle of equality of fractions B. Rule for product of fraction C. Rule for quotient of fraction D. Golden rule of fractions
6	Gooch crucible is made of :	A. Brass. B. Porcelain. C. Bronze. D. Gold.
7	Every recurring decimal represents	A. A natural number B. A rational number C. An irrational number D. A whole number
8	$\pi$ is _____	A. A complex number B. A rational number C. A natural number D. An irrational number
9	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)
10	$1/3$ is a decimal	A. Recurring B. Terminating C. Non-terminating D. None of the above
11	$\sqrt{x} = \text{_____}$ if is a prime number	A. Rational no B. Natural no C. Irrational no D. Complex no
12	Question Image	A. Principle of equality of fractions B. Rule for product of fractions C. Golden rule for fractions D. Rule for quotient of fractions
13	Question Image	
14	$3/2$ is	A. An irrational number B. Whole number C. A positive integer D. A rational number
15	In $\mathbb{R}$ , the multiplicative inverse of a is	A. 0 B. 1 C. -a D. $1/a$
16	The square root of $2i - 20i$ is	A. $+(5 - 2i)$ B. $+(5 + 2i)$ C. $(5 - 2i)$ D. None of these
17	$\forall a, b, c \in \mathbb{R}$ and $c > 0$ , then	A. $a > b \Rightarrow ac < bc$ B. $a > b \Rightarrow ac > bc$ C. $a < b \Rightarrow ac > bc$ D. None of these
		A. An irrational number

18 0.25 is \_\_\_\_\_

- B. A natural number
- C. A prime number
- D. A rational number

19  $i^{101} =$

- A.  $i$
- B.  $i^2$
- C.  $-i$
- D.  $-1$

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