

## 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 <input style="width: 500px; height: 20px;" type="text"/>	A. Principle of equality of Fractions B. Rule for product of fraction C. Golden rule of fraction D. Rule of quotient of Fraction
3	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 1 B. -i C. i D. 0
4	The product of complex numbers (a,b) and (c,d) is	A. (ac, bd) B. (ac-bd, ad+bc) C. (ab, cd) D. (ac+bd, ad-bc)
5	QUQ, =	A. N B. R C. W D. Z
6	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
7	The conjugate of $\sqrt{5} i$ is	A. $\sqrt{5}$ B. $-\sqrt{5} i$ C. i D. 5i
8	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
9	The additive inverse of 1 is	A. 1 B. -1 C. 0 D. Does not exist
10	$\forall x, y, z \in \mathbb{R}$ and $z > 0$ , then	A. $x > y \Rightarrow xz > yz$ B. $x < y \Rightarrow xz < yz$ C. $x < y \Rightarrow xz > yz$ D. None of these
11	$\forall x, y \in \mathbb{R}$ and $x > 0, y > 0$ , if $x > y$	D. None of these
12	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
13	$i^{101} =$	A. i B. $i^{>2</sup>}$ C. -i D. -1
14	Every irrational number is	A. A real number B. A prime number C. A natural number D. An integer
15	$\sqrt{11}$ is	A. an irrational number B. Rational number C. odd number D. Negative number
16	Name the property used in $4.1 + (-4.1) = 0$	A. Additive inverse B. Multiplication inverse C. Additive identity D. Multiplication identity
17	$\forall a, b, c \in \mathbb{R}, a + c = b + c \Rightarrow a = b$	A. Reflexive property B. Symmetric property C. Cancellations property w.r.t. addition D. Transitive property
18	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Set of whole number B. Rational Numbers

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C. Complex numbers  
D. Whole numbers

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Question Image

A. 1  
B. 3  
C. 2-i  
D. -1

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$(\sqrt{3}+\sqrt{5})+\sqrt{7} = \sqrt{3} +(\sqrt{5} +\sqrt{7})$  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 addition

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