

ECAT Mathematics Chapter 1 Number System

| Sr | Questions | Answers Choice |
|----|--|--|
| 1 | $\forall x, y \in \mathbb{R}$ and $x > 0, y > 0$, if $x > y$ | D. None of these |
| 2 | Associative law of multiplication | A. $ab = ba$ B. $a(bc) = (ab)c$ C. $a(b+c) = ab + ac$ D. $(a + b)c = ac + bc$ |
| 3 | $\forall x, y, z \in \mathbb{R}$ and $z \neq 0$, then | A. $x > y \Rightarrow xz > yz$ B. $x < y \Rightarrow xz < yz$ C. $x < y \Rightarrow xz > yz$ D. None of these |
| 4 | $\sqrt{x} = \text{_____}$ if is a prime number | A. Rational no B. Natural no C. Irrational no D. Complex no |
| 5 | $\mathbb{Q}, \mathbb{R}, \mathbb{W}, \mathbb{Z}$ = | A. \mathbb{N} B. \mathbb{R} C. \mathbb{W} D. \mathbb{Z} |
| 6 | Question Image <input style="width: 100%;" type="text"/> | A. Associative law of addition B. Commutative law of addition C. Additive identity D. Closure law of addition |
| 7 | Question Image <input style="width: 100%;" type="text"/> | A. Commutative law of addition B. Associative law of addition C. Additive identity D. Additive inverse |
| 8 | Total number of subsets that can be formed out of the set $\{a, b, c\}$ is | A. 1 B. 4 C. 8 D. 12 |
| 9 | Question Image <input style="width: 100%;" type="text"/> | A. Set of whole number B. Rational Numbers C. Complex numbers D. Whole numbers |
| 10 | The negative square root of 9 can be written as: | A. $-\sqrt{9}$ B. $\sqrt{9}$ C. $\sqrt{18}$ D. $-\sqrt{18}$ |
| 11 | A non-terminating non-recurring decimal represents an | A. Irrational no B. Both a & b C. Rational no D. None of these |
| 12 | In \mathbb{R} the left cancellation property w.r.t addition is | |
| 13 | $1.4142135\dots$ is _____ | A. A natural number B. A rational number C. A prime number D. An irrational number |
| 14 | The set $\{1, -1\}$ is closed w.r.t. | A. Addition B. Multiplications C. Subtraction D. None of these |
| 15 | What is the conjugate of $-7 - 2i$? | A. $-7 + 2i$ B. $7 + 2i$ C. $7 - 2i$ D. $\sqrt{53}$ |
| 16 | i is not | A. Real number B. Natural number C. Prime Number D. Whole Number |

17 The solution set of the equation $|3x + 2| = 5$ is

18 $\sqrt{2} + \sqrt{3} + \sqrt{5} = (\sqrt{2} + \sqrt{3} + \sqrt{5})$: this property is called

- A. associative property w.r.t addition
- B. commutative property
- C. Closure property w.r.t addition
- D. Additive identity

19 0.25 is _____

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

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- A. Trichotomy property
- B. Additive property of inequality
- C. Transitive property
- D. Multiplicative property