

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

| Sr | Questions  | Answers Choice   |
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| 1  | $3.5+5.4=5.4+3.5=8.9$ this property of addition is called  | A. additive identity<br>B. associative property<br>C. commutative property<br>D. closure property  |
| 2  | $\forall x,y,z \in \mathbb{R}$ and $z \neq 0$ , then   | A. $x > y \Rightarrow xz > yz$<br>B. $x < y \Rightarrow xz < yz$<br>C. $x < y \Rightarrow xz > yz$<br>D. None of these   |
| 3  | $(a,0) \times (c, 0) =$  | A. $(0,ac)$<br>B. $(ac, 0)$<br>C. $(0,0)$<br>D. $(a, c)$   |
| 4  | Question Image   | A. Associative property of addition<br>B. Associative property of multiplication<br>C. Commutative property of addition<br>D. Commutative property of multiplication |
| 5  | The set $\{1, -1\}$ is closed w.r.t.   | A. Addition<br>B. Multiplications<br>C. Subtraction<br>D. None of these  |
| 6  | The multiplicative inverse of 4 is   | A. -4<br>B. $-1/4$<br>C. $1/4$<br>D. 1   |
| 7  | Union of the sets of rational and irrational numbers is called 6th set of  | A. Natural numbers<br>B. Real numbers<br>C. Whole numbers<br>D. Prime numbers  |
| 8  | Name the property used in $1000 \times 1 = 1000$   | A. additive inverse<br>B. multiplicative inverse<br>C. additive identity<br>D. multiplicative identity   |
| 9  | If $\forall a,b \in \mathbb{R}$ , then $a+b \in \mathbb{R}$ is a property  | A. Closure law of addition<br>B. Associative law of addition<br>C. Additive inverse<br>D. Additive identity  |
| 10 | Every natural number is  | A. A prime number<br>B. An irrational number<br>C. An integer<br>D. An even number   |
| 11 | If $Z = (1,2)$ , then $Z^{-1} = ?$   | A. $(0.2, 0.4)$<br>B. $(-0.2, 0.4)$<br>C. $(0.2, -0.4)$<br>D. $(-0.2, -0.4)$   |
| 12 | $(a+bi) - (c+di) =$  | A. $(a+b) = (c+d)$<br>B. $(a+c) + i(b+d)$<br>C. $(a-c) + (c-d)i$<br>D. $(a-c) + (b-d)i$  |
| 13 | Zero is  | A. An irrational number<br>B. A rational number<br>C. A negative integer<br>D. A positive number   |
| 14 | The equation $ x+4  = x$ has solution  | A. $x = -2$<br>B. $x = 2$<br>C. $x = -4$<br>D. $x = 4$   |
| 15 | Such fraction which can not be written in the form of $p/q$ where $p, q$ and $q \neq 0$ , such fractions are called. | A. Fractal numbers<br>B. Rational Numbers<br>C. Even Numbers   |

## D. Whole Numbers

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|----|--|--|
| 16 | Question Image                                   | A. x<br>C. y   |
| 17 | 0 (zero) is                                      | A. An irrational number<br>B. A rational number<br>C. A negative integer<br>D. A positive number             |
| 18 | The property used in $-3 < -2 \Rightarrow 0 < 1$ | A. Commutative property<br>B. Additive property of inequality<br>C. Additive inverse<br>D. Additive identity |
| 19 | The real number system contains.                 | A. Positive Numbers<br>B. Negative numbers<br>C. Zero<br>D. (option a, b and c)                              |
| 20 | Multiplicative inverse of "1" is                 | A. 0<br>B. $\pm 1$<br>C. 1<br>D. $\{0, 1\}$  |