

## ECAT Mathematics Chapter 2 Set Function and Groups

Sr	Questions	Answers Choice
1	Question Image	A. Every element of A is in B B. Every element of B is in A C. Every element of A is in B' D. Every element of A is in A
2	If $x = 1/x$ for $x \in \mathbb{R}$ then the value of x is	A. $\pm 1$ B. 0 C. 2 D. 4
3	The set which has no proper subset is	A. $\{0\}$ B. $\emptyset$ C. $\{x\}$ D. None of these
4	The set of whole numbers is subset of	A. The set of integers B. The set of natural numbers C. $\{1, 3, 5, 7, \dots\}$ D. The set of prime numbers
5	Question Image	A. Biconditional B. Implication C. Antecedent D. Hypothesis
6	Question Image	
7	A function whose range is just one elements is called	A. One-one function B. Constant function C. Onto function D. Identity function
8	Onto function is also called	A. Bijective function B. Injective function C. Surjective function D. None of these
9	The set of months in a year beginning with S.	A. $\{\text{September, October, November}\}$ B. Singleton set C. Null set D. Empty set
10	The number of subsets of B = $\{1, 2, 3, 4, 5\}$	A. 10 B. 32 C. 16 D. 5
11	Question Image	A. Singleton set B. A set with two points C. Empty set D. None of these
12	The function $f(x, y)   y = ax^2 + bx + c$ is	A. One-one function B. Constant function C. Onto function D. Quadratic function
13	The set $\{a, b\}$ is	A. Infinite set B. Singleton set C. Two points set D. Empty set
14	If $P = \{x   x = p/q \text{ where } p, q \in \mathbb{Z} \text{ and } q \neq 0\}$ , then P is the set of	A. Irrational numbers B. Even numbers C. Rational numbers D. Whole numbers
15	If the intersection of two sets is non-empty, but either is a subset of other are called	A. Disjoint sets B. Overlapping C. Equal sets D. None of these
16	$Z$ is the set of integers ( $Z^*$ ) is a group with $a * b = a + b + 1$ , $a, b \in G$ . then inverse of a is	A. $-a$ B. $a + 1$ C. $-1 - a$

		D. None of these
17	$\{x x \in R \wedge x \neq x\}$ is a	A. Infinite set B. Null set C. Finite set D. None of these
18	Which of the following is the definition of singleton	A. The objects in a set B. A set having no element C. A set having no subset D. None of these
19	The set of natural numbers is a subset of	A. {1, 2, 3, ..., 100} B. The set of whole numbers C. {2, 4, 6, 8, ...} D. None of these
20	The set X is	A. Proper Subset of X B. Not A subset of X C. Improper Subset of X D. None of these