

## ECAT Mathematics Chapter 2 Set Function and Groups

Sr	Questions	Answers Choice
1	The set $\{-1, 1\}$ is	A. Group under the multiplication B. Group under addition C. Does not form a group D. Contains no identity element
2	If the intersection of two sets is non-empty, but either is a subset of other are called	A. Disjoint sets B. Over lapping C. Equal sets D. None of these
3	The set $\{1, -1, 1, -1\}$ , form a group under	A. Addition B. Multiplication C. Subtraction D. None
4	A function whose range is just one elements is called	A. One-one function B. Constant function C. Onto function D. Identity function
5	The set $\{-1, 1\}$ is closed under the binary operation of	A. Addition B. Multiplication C. Subtraction D. Division
6	For any two sets A and, $A \subseteq B$ if	A. $x \in A \Rightarrow x \in B$ B. $x \notin A \Rightarrow x \notin B$ C. $x \in A \Rightarrow x \notin B$ D. None of these
7	Question Image	A. A B. A' C. U D. A A'
8	The extraction of cube root of a given number is a	A. Unary Operation B. Binary Operation C. Relation D. None of these
9	Question Image	
10	The set $\{x x \in \mathbb{N} \wedge x-4=0\}$ in tabular form is	A. $\{-4\}$ B. $\{0\}$ C. $\{\}$ D. None of these
11	The negation of a number	A. a relation B. a function C. unary operation D. binary operation
12	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. -2 -a D. None of these
13	$P \notin A$ means	A. $P$ is subset of A B. $P$ is an element of A C. $P$ does not belongs to A D. A does not element of P
14	The complement of set A relative to universal set U is the set	A. $\{x / x \in A \wedge x \in U\}$ B. $\{x / x \notin A \wedge x \in U\}$ C. $\{x / x \in A \text{ and } x \notin U\}$ D. A-U
15	Additive inverse of -a -b is	A. a B. -a + b C. a - b D. a + b
16	If P is a proposition then its negative is denoted by	A. True

17	The statement that a group can have more than one identity elements is	<p>B. False</p> <p>C. Ambiguous</p> <p>D. Some times true</p>
18	If $f:A \rightarrow B$ is an injective function and second elements of no two of its ordered pairs are equal, then $f$ is called	<p>A. 1-1 and onto</p> <p>B. Bijective</p> <p>C. 1-1 and into</p> <p>D. None of these</p>
19	$\{x : x \in \mathbb{Z} \text{ and } x < 1\}$ is	<p>A. Singleton set</p> <p>B. A set with two points</p> <p>C. Empty set</p> <p>D. None of these</p>
20	Question Image	