

ECAT Mathematics Chapter 2 Set Function and Groups

Sr	Questions	Answers Choice
1	{1, 2, 3} is _____	A. an infinite set B. A finite set C. A singleton set D. Universal set
2	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. A is proper subset of B B. A is an improper subset of B C. A is equivalent to B D. B is subset of A
3	The function $f\{(x, y) y = ax^2 + bx + c\}$ is	A. One-one function B. Constant function C. Onto function D. Quadratic function
4	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Biconditional B. Implication C. Antecedent D. Hypothesis
5	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
6	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. A B. A' C. U D. None of these
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. -x B. Infinite set C. {-4, 4} D. None of these
8	Question Image <input style="width: 500px; height: 20px;" type="text"/>	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
9	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
10	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
11	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
12	$(A \cap B)^c =$	A. $A \cap B$ B. $(A \cup B)^c$ C. $A^c \cup B^c$ D. ϕ
13	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
14	If A and B are two sets then any subset R of $B \times A$ is called	A. relation on A B. relation on B C. relation from A to B D. relation from B to A
15	The set of the first elements of the ordered pairs forming a relation is called its	A. Function on B B. Range C. Domain D. A into B
16	The set $\{Z \setminus \{0\}\}$ is group w.r.t	A. Addition B. Multiplication C. Division

D. Subtraction

17 The sets $\{1, 2, 4\}$ and $\{4, 6, 8, 10\}$ are

- A. Equal sets
- B. Equivalent sets
- C. Disjoint sets
- D. Over lapping sets

18 Question Image

19 What is the number of elements of the power set of $\{0, 1\}$

- A. 1
- B. 2
- C. 3
- D. 4

20 If $S = \{3, 6, 9, 12, \dots\}$, then

- A. $S =$ Four multiples of 3
- B. $S =$ Set of even numbers
- C. $S =$ Set of prime numbers
- D. $S =$ All multiples of 3