

## ECAT Mathematics Chapter 2 Set Function and Groups

Sr	Questions	Answers Choice
1	Question Image	A. A B. A' C. U D. None of these
2	Question Image	
3	Let A,B and C be any sets such that $A \cup B = A \cup C$ and $A \cap B = A \cap C$ then	A. $A = B$ B. $B = C$ C. $A \neq C$ D. $A \neq B$
4	$\{1, 2, 3, 4, \dots\}$ is set of _____	A. Natural numbers B. Whole numbers C. Integers D. Rational numbers
5	Question Image	A. A B. B C. U D. None of these
6	The set $\{-1, 1\}$ is closed under the binary operation of	A. Addition B. Multiplication C. Subtraction D. Division
7	$A \cup (A \cap B) =$ -----	A. B B. A C. $A \cup B$ D. None of these
8	Given X,Y are any two sets such that number of elements in set X = 28, number of elements in set Y = 28, and number of elements in set $X \cup Y = 54$ , then number of elements in set $X \cap Y =$	A. 4 B. 3 C. 2 D. 1
9	The set $\{x + iy / x, y \in \mathbb{Q}\}$ forms a group under the binary operation of	A. Addition B. Multiplication C. Division D. Both addition and multiplication
10	Onto function is also called	A. Bijective function B. Injective function C. Surjective function D. None of these
11	Empty set is	A. Not subset of every set B. Finite set C. Infinite set D. Not the member of real numbers
12	If A and B are two sets then any subset R of $A \times B$ is called	A. relation on A B. relation on B C. relation from A to B D. relation from B to A
13	Which symbolic notation represent unary operation ?	A. - B. $\vee$ C. $\wedge$ D. $\Leftrightarrow$
14	The set $\{1, -1, 1, -1\}$ , form a group under	A. Addition B. Multiplication C. Subtraction D. None
15	Question Image	
16	If a set S contains "n" elements then $P(S)$ has ..... number of elements	A. $2^{n-1}$ B. $2^{n+1}$ C. $2 \cdot n$ D. $2^n$

17	$\{0\}$ is a	A. Empty set B. Singleton set C. Zero set D. Null Set
18	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
19		A. A B. B C. A'B' D. B'A
20	If p and q are two statements then their conjunction is denoted by	