

ECAT Mathematics Chapter 2 Set, Functions and Groups

Sr	Questions	Answers Choice
1	Question Image	A. $A = B$ B. $B = C$ C. $A = C$ D. None of these
2	Power set of X i.e $P(X)$ _____ under the binary operation of union U	A. Forms a group B. Does not form a group C. Has no identity element D. Infinite set although X is infinite
3	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
4	If $a = \{2m/2m < 9, m \in p\}$, the $(n A) =$	A. $\{2, 3, 4, 5, 6, 7, 8\}$ B. $\{2, 4, 6, 8, \dots, 16\}$ C. $\{4, 6\}$ D. $\{2, 3, 5, 7\}$
5	Question Image	A. $A = C$ B. $A = B$ C. $B = C$ D. None of these
6	What is the number of elements of the power set of $\{0, 1\}$	A. 1 B. 2 C. 3 D. 4
7	Power set of X i.e $P(X)$under the binary operation of union U	A. Forms a group B. Does not form a group C. Has no identity element D. Infinite set although X is infinite
8	The set X is	A. Proper Subset of X B. Not A subset of X C. Improper Subset of X D. None of these
9	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
10	$G = \{e, a, b, c\}$ is an Abelian group with e as identity element. The order of the other elements are	A. 2, 2, 2 B. 3, 3, 3 C. 2, 2, 4 D. 2, 3, 4
11	Which symbolic notation represent unary operation ?	A. - B. \vee C. \wedge D. \Leftrightarrow
12	Which conjunction is not true ?	
13	A function whose range is just one element is called	A. One-one function B. Constant function C. Onto function D. Identity function
14	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
15	The set of natural numbers is a subset of	A. $\{1, 2, 3, \dots, 100\}$ B. The set of whole numbers C. $\{2, 4, 6, 8, \dots\}$ D. None of these
16	Question Image	A. 1 B. 12 C. 5

17 The number of subset of $\{0\}$ is

- A. 1
- B. 2
- C. 3
- D. None

18 If $A \subseteq B$, and B is a finite set, then

- A. $n(A) < n(B)$
- B. $n(B) < n(A)$
- C. $n(A) \leq n(B)$
- D. $n(A) \geq n(B)$

19 In set builder notation the set $\{0, 1, 2, \dots, 100\}$ can be written as

20 Question Image

- D. none of these