

ECAT Mathematics Chapter 2 Set Function and Groups

Sr	Questions	Answers Choice
1	The number of different ways of describing a set is	A. One B. Two C. Three D. Four
2	Question Image	
3	If $A = \{2m/m^3 = 8, m \in \mathbb{Z}\}$ then $A =$	A. $\{1, 8, 27\}$ B. $\{4\}$ C. $\{2, 4, 6\}$ D. $\{2, 16, 54\}$
4	$A = B$ iff	A. All elements of A also the elements of B B. A and B should be singleton C. A and B have the same number of elements D. If both have the same element
5	For any set B, $B \cup B'$ is	A. Is set B B. Set B' C. Universal set
6	$G = \{e, a, b, c\}$ 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
7	Write down the power set of $\{9, 11\}$	
8	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	A. 1-1 and onto B. Bijective C. 1-1 and into D. None of these
9	Question Image	
10	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
11	Question Image	D. None of these
12	Question Image	A. Addition B. Multiplication C. Division D. Both addition and multiplication
13	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
14	The set of natural is a semi group w.r.t	A. Addition B. Division C. Subtraction D. None of these
15	The set X is	A. Proper Subset of X B. Not A subset of X C. Improper Subset of X D. None of these
16	The set $\{x/x \in \mathbb{N} \wedge x-4=0\}$ in tabular form is	A. $\{-4\}$ B. $\{0\}$ C. $\{\}$ D. None of these
17	Which conjunction is not true ?	
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. A set having one element

D. None of these

19 The graph of a quadratic function is

- A. Circle
- B. Ellipse
- C. Parabola
- D. Hexagon

20 $A = B$ if

D. A is equivalent to B