

ECAT Mathematics Chapter 2 Set Function and Groups

Sr	Questions	Answers Choice
1	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. A B. B C. U D. None of these
2	The set $\{-1,1\}$ is closed under the binary operation of	A. Addition B. Multiplication C. Subtraction D. Division
3	The set of complex numbers forms	A. Commutative group w.r.t addition B. Commutative group w.r.t multiplication C. Commutative group w.r.t division D. Non commutative group w.r.t addition
4	$\{x : x \in \mathbb{Z} \text{ and } x < 1\}$ is	A. Singleton set B. A set with two points C. Empty set D. None of these
5	If $A \subseteq B$ then $A \cup B$ is	A. A B. B C. A' D. $A \cap B$
6	If $C = \{p/p < 18, p \text{ is a prime number}\}$, then $C =$	A. $\{2,3,4,\dots,17\}$ B. $\{2,4,6,8,\dots,16\}$ C. $\{1,3,5,7,9,11,13,15,17\}$ D. $\{3,6,9,12,15\}$
7	If $\#n = (n-5)^2 + 5$, then find $\#3 \times \#4$.	A. 54 B. 12 C. 4 D. 9
8	The total number of subsets that can be formed out of the set $\{a, b, c\}$ is	A. 1 B. 4 C. 8 D. 12
9	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. A B. B C. U D. None of these
10	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
11	If $A \cap B = B$, then $n(A \cap B)$ is equal to	A. $n(a)$ B. $n(a) + n(c)$ C. $n(c)$ D. None of these
12	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
13	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Conclusion B. Implication C. Antecedent D. Hypothesis
14	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. A finite set B. An infinite set C. An empty set D. None of these
15	The set R is _____ w.r.t subtraction	A. Not a group B. A group C. No conclusion drawn D. Non commutative group

16	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. $A \neq C$ B. $B = C$ C. $A = B$ D. $A \neq B$
17	The set of months in a year beginning with S.	A. {September, October, November} B. Singleton set C. Null set D. Empty set
18	Question Image <input type="text"/>	
19	The set of complex numbers forms a group under the binary operation of	A. Addition B. Multiplication C. Division D. Subtraction
20	A disjunction of two statement p and q is true	A. p is false B. q is false C. Both p and q are false D. One of p and q is true