

ECAT Mathematics Chapter 2 Set, Functions and Groups

| Sr | Questions | Answers Choice |
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| 1 | The set of the first elements of the ordered pairs forming a relation is called its | A. Relation in B B. Range C. Domain D. Relation in A |
| 2 | $\{x : x \in Z \text{ and } x < 1\}$ is | A. Singleton set B. A set with two points C. Empty set D. None of these |
| 3 | if $A = \{x : x \in Q \wedge 0 < x < 1\}$, then A is | A. Infinite set B. Finite set C. Set of rational numbers D. Set of real numbers |
| 4 | The set $\{x + iy / x, y \in Q\}$ forms a group under the binary operation of | A. Addition B. Multiplication C. Division D. Both addition and multiplication |
| 5 | The set of the first elements of the ordered pairs forming a relation is called its | A. Relation in B B. Range C. Domain D. Relation in A |
| 6 | 0 is a symbol of | A. singleton set B. Empty set C. Equivalent set D. Infinite set |
| 7 | The number of subsets of $\{0\}$ is | A. 1 B. 2 C. 3 D. None |
| 8 | Question Image | |
| 9 | The set $\{\{a, b\}\}$ is | A. Infinite set B. Singleton set C. Two points set D. None |
| 10 | Power set of X i.e $P(X)$ _____ under the binary operation of union \cup | A. Forms a group B. Does not form a group C. Has no identity element D. Infinite set although X is infinite |
| 11 | For any set X , $X \cup X$ is | A. X B. X' C. \emptyset D. Universal Set |
| 12 | Question Image | |
| 13 | 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 |
| 14 | The set of real numbers is a subset of | A. The set of natural numbers B. The set of rational numbers C. The set of integers D. The set of complex numbers |
| 15 | To each element of a group there corresponds _____ inverse element | A. Two B. One C. No D. Three |
| 16 | Question Image | A. $-x$ B. Infinite set C. $\{-4, 4\}$ D. None of these |

17 Φ set is the _____ of all sets

A. Subset
B. Union
C. Universal
D. Intersection

18 Additive inverse of $-a - b$ is

A. a
B. $-a + b$
C. $a - b$
D. $a + b$

19 For any set B, $B \cup B'$ is

A. Is set B
B. Set B'
C. Universal set

20 If there is one-one correspondence between A and B, then we write.

A. $A = B$
B. $A \subseteq B$
C. $A \supseteq B$
D. $A \sim B$
