

ECAT Mathematics Chapter 23

Sr	Questions	Answers Choice
1	Question Image	<p>A. Every element of A is in B</p> <p>B. Every element of B is in A</p> <p>C. Every element of A is in B'</p> <p>D. Every element of A is in A</p>
2	Question Image	<p>A. Natural numbers</p> <p>B. Whole numbers</p> <p>C. Integers</p> <p>D. Rational numbers</p>
3	{1, 2, 3, 4,.....} is set of _____	<p>A. Natural numbers</p> <p>B. Whole numbers</p> <p>C. Integers</p> <p>D. Rational numbers</p>
4	The number of different ways of describing a set is	<p>A. One</p> <p>B. Two</p> <p>C. Three</p> <p>D. Four</p>
5	The set $(\mathbb{Z}, +)$ forms a group	<p>A. Forms a group w.r.t addition</p> <p>B. Forms a group w.r.t multiplication</p> <p>C. Non commutative group w.r.t multiplication</p> <p>D. Doesn't form a group</p>
6	Power set of X i.e $P(X)$under the binary operation of union \cup	<p>A. Forms a group</p> <p>B. Does not form a group</p> <p>C. Has no identity element</p> <p>D. Infinite set although X is infinite</p>
7	The set $\{\mathbb{Z} \setminus \{0\}\}$ is group w.r.t	<p>A. Addition</p> <p>B. Multiplication</p> <p>C. Division</p> <p>D. Subtraction</p>
8	The set \mathbb{R} isw.r.t subtraction	<p>A. Not a group</p> <p>B. A group</p> <p>C. No conclusion drawn</p> <p>D. Non commutative group</p>
9	The set $\{1, -1, i, -i\}$	<p>A. Form a group w.r.t addition</p> <p>B. Form a group w.r.t multiplication</p> <p>C. Does not form a group w.r.t multiplication</p> <p>D. Not closed under multiplication</p>
10	The set of complex numbers forms	<p>A. Commutative group w.r.t addition</p> <p>B. Commutative group w.r.t multiplication</p> <p>C. Commutative group w.r.t division</p> <p>D. Non commutative group w.r.t addition</p>
11	The set $\{-1, 1\}$ is	<p>A. Group under the multiplication</p> <p>B. Group under addition</p> <p>C. Does not form a group</p> <p>D. Contains no identity element</p>
12	The set $\{x + iy \mid x, y \in \mathbb{Q}\}$ forms a group under the binary operation of	<p>A. Addition</p> <p>B. Multiplication</p> <p>C. Division</p> <p>D. Both addition and multiplication</p>
13	The set of integer is	<p>A. Finite group</p> <p>B. A group w.r.t addition</p> <p>C. A group w.r.t multiplication</p> <p>D. Not a group</p>
14	To each element of a group there corresponds inverse element	<p>A. Two</p> <p>B. One</p> <p>C. No</p> <p>D. Three</p>

15	The function $\{f(x,y) y = ax^2 + bx + c\}$ is	A. One-one function B. Constant function C. Onto function D. Quadratic function
16	A function whose range is just one element is called	A. One-one function B. Constant function C. Onto function D. Identity function
17	A function in which the second elements of the order pairs are distinct is called	A. Onto function B. One-one function C. Identity function D. Inverse function
18	The set of the first elements of the orders pairs forming a relation is called its	A. Relation in B B. Range C. Domain D. Relation In A
19	$(A \cap B)^c =$	A. $A \cap B$ B. $(A \cup B)^c$ C. $A^c \cup B^c$ D. ϕ
20	The set $\{ \{a,b\} \}$ is	A. Infinite set B. Singleton set C. Two points set D. Empty set