

ECAT Mathematics Chapter 23

Sr	Questions	Answers Choice
1	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
2	The statement that a group can have more than one identity elements is	A. True B. False C. Ambiguous D. Some times true
3	The set $\{Z \setminus \{0\}\}$ is group w.r.t	A. Addition B. Multiplication C. Division D. Subtraction
4	The set R is _____ w.r.t subtraction	A. Not a group B. A group C. No conclusion drawn D. Non commutative group
5	The set $\{1, -1, i, -i\}$	A. Form a group w.r.t addition B. Form a group w.r.t multiplication C. Does not form a group w.r.t multiplication D. Not closed under multiplication
6	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
7	The multiplicative inverse of -1 in the set $\{1, -1\}$ is	A. 1 B. -1 C. +1 D. 0
8	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
9	Question Image 	A. Addition B. Multiplication C. Division D. Both addition and multiplication
10	The set of integer is	A. Finite group B. A group w.r.t addition C. A group w.r.t multiplication D. Not a group
11	To each element of a group there corresponds _____ inverse element	A. Two B. One C. No D. Three
12	The function $f\{(x, y) \mid y = ax^2 + bx + c\}$ is	A. One-one function B. Constant function C. Onto function D. Quadratic function
13	The graph of a quadratic function is	A. Circle B. Straight line C. Parabola D. Triangle
14	A function whose range is just one elements is called	A. One-one function B. Constant function C. Onto function D. Identity function
		A. Relation in B - -

15	The set of the first elements of the ordered pairs forming a relation is called its	B. Range C. Domain D. Relation in A
16	If $n = (n-5)^2 + 5$, then find $n \times n$.	A. 54 B. 12 C. 4 D. 9
17	Question Image	
18	The set $\{ \{a, b\} \}$ is	A. Infinite set B. Singleton set C. Two points set D. Empty set
19	Question Image	A. Singleton set B. A set with two points C. Empty set D. None of these
20	Φ set is the _____ of all sets?	A. Subset B. Union C. Universal D. Intersection