ECAT Mathematics Chapter 23

Sr	Questions	Answers Choice
1	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
2	The set {x +iy / x, y ∈ Q} forms a group under the binary operation of	A. Addition B. Multiplication C. Division D. Both addition and multiplication
3	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
4	To each element of a group there corresponds ..... inverse element	A. Two B. One C. No D. Three
5	The function {f(x,y)|y = ax2 +bx +c} is	A. One-one function B. Constant function C. Onto function D. Quadratic function
6	A function whose range is just one element is called	A. One-one function B. Constant function C. Onto function D. Identity function
7	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
8	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
9	(A ∩ B)c =	A. A∩ B B. (A ∪ B)c C. Ac∪Bc D. Φ
10	The set { {a,b} } is	A. Infinite set B. Singleton set C. Two points set D. Empty set
11	{x : xε Z and x < 1} is	A. Singleton set B. A set with two points C. Empty set D. None of these
12	Φ set is the _____ of all sets	A. Subset B. Union C. Universal D. Intersection
13	The set {-1,1} is closed under the binary operation of	A. Addition B. Multiplication C. Subtraction D. Division
14	If x = 1/x for x ∈ R then the value of x is	A. ±1 B. 0 C. 2 D. 4
15	Let A,B and C be any sets such that A∪B = A∪C and A∩ B = A∩ C then	A. A = B B. B = C C. A≠ C D. A ≠ B

16	If n(X) = 18, n(X∩Y) = 7, n(X∪ Y) = 40 then n(Y) =	A. 1 B. 12 C. 5 D. 29
17	Given X.Y are any two sets such that number of elements in X = 18, number of elements in set Y = 24,and number of elements in set X∪ Y =40,then number of elements in set x∩ Y =	A. 3 B. 1 C. 2 D. 4
18	If A ⊆ B then A ∪ B is	A. A B. B C. A' D. A ∩B
19	For any set B,B∪B' is	A. Is set B B. Set B' C. Universal set
20	The set (Z,+) forms a group	A. Forms a group w.r.t addition B. Non commutative group w.r.t multiplication C. Forms a group w.r.t multiplication D. Doesn't form a group