ECAT Mathematics Chapter 2 Set Function and Groups

Sr	Questions	Answers Choice
1	Let A,B, and C be any sets such that A∪B = A∪C and A∩B = A∩C then	A. A≠ C B. B = C C. A = B D. A≠ B
2	Φset is the _____ of all sets?	A. Subset B. Union C. Universal D. Intersection
3	Z is the set of integers, (z, *) is a group with a * b = a + b + 1, a, b $\in$G. then inverse of a is	A. -a B. a + 1 C. -2 -a D. None of these
4	If A = {x/x is a positive integer and 4≤x<23}, then A=	A. {1,2,3,4,5,6,7} B. {4,5,6.....22} C. {1,2,3,.....23} D. {1,2,3,4,5}
5	If A = {2m/m^3= 8 , m€ Z} then A =	A. {1,8,27} B. {4} C. (2,4,6} D. {2,16,54}
6	If a 1-1 correspondence can be established b/w two sets A and B, then they are called	A. Equal sets B. Equivalent sets C. Over lapping sets D. None of these
7	Two sets A and B are said to be disjoint if	
8	If T = {2,4,6,8,10,12}, then	A. T = (First six natural numbers) B. T = (First six odd numbers) C. T = (First six real numbers) D. T = (First six even numbers)
9	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
10	*P∉A means*	A. Pis subset of A B. Pis an element of A C. P does not belongs to A D. A does not element of P
11	If f:A→B is an injective function and second elements of no two of its ordered pairs are equal, then f is called	A. 1-1 and onto B. Bijective C. 1-1 and into D. None of these
12	If A⊆ B, and B is a finite set, then	A. n (a) < n(B) B. n(B)<(A) C. n(A)≤ n (B) D. n(A)≥ n(B)
13	If x = 1/x for x ∈ R then the value of x is	A. ±1 B. 0 C. 2 D. 4
14	Question Image	
15	If A is a subset of B and B contains at least one element which is not an element of A, then A is said to be	A. Improper subset of B B. Super set of B C. Proper subset of B D. None of these
16	If B ={x/x€ Z ^ - 3 < x < 6}, then n (B) =	A. 5 B. {-3,-2,-1,0,1,2,3,4,5,6} C. 8

		D. 9
17	Question Image	D. None of these
18	Z is a group under	A. Subtraction B. Multiplication C. Addition D. None of these
19	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
20	A set having only one element is called	A. An empty set B. Universal set C. A singleton set D. A power set