ECAT Mathematics Chapter 23

Sr	Questions	Answers Choice
1	The complement of set A relative to universal set U is the set	A. {x / x∈ A∧ x∈ U} B. {x / x∉ A∧ x ∈ U} C. {x / x∈ A and x ∉ U} D. A-U
2	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
3	Given X,Y are any two sets such that number of elements in set X = 28, number of elements in set Y = 28, and number of elements in set X∪Y = 54, then number of elements in set X ∩ Y =	A. 4 B. 3 C. 2 D. 1
4	For any set X, X∪X is	A. X B. X' C. Φ D. Universal Set
5	G = {e, a, b, c} is an Abelian group with e as identity element The order of the other elements are	A. 2,2,2 B. 3,3,3 C. 2,2,4 D. 2,3,4
6	Z is the set of integers (Z.*) is a group with a * b = a +b +1, a,b ∈ G.then inverse of a is	A. -a B. a +1 C. -1-a D. None of these
7	Which of the following has the same value as i113	A. i B. -1 C. -i D. 1
8	If z1 = 2 + 6i and z2 = 3 + 7i then which expression defines the product of z1 and z2	A. 36 +(-32)i B. -36+32i C. 6+(-11)i D. 0, +(-12)i
9	Under multiplication, solution set of is	A. Groupoid B. Abelian group C. Semi group D. All of these
10	Identity w.r.t intersection in a power set of any set is	A. ∅ B. Set itself C. Singleton set D. {0}
11	Which symbolic notation represent unary operation ?	A. - B. ∨ C. ∧ D. ⇔
12	Which conjunction is not true ?	
13	Power set of difference set N-W is	A. Empty set B. Infinite set C. Singleton set D. {0,∅}
14	Question Image	A. A onto B B. both a & c C. A into B D. none of these
15	Question Image	A. a-b=ab B. ab=a C. a+b=ab
16	Group of none-singular matrices under multiplication is	A. None-Abelian group B. Semi group C. Abelian group D. None of these

17	Z is a group under	A. Subtraction B. Multiplication C. Addition D. None of these
18	The identity element of a set X with respect to intersection in P(x) is	A. X B. Does not exist C. ∅ D. None of these
19	The extraction of cube root of a given number is a	A. Unary Operation B. Binary Operation C. Relation D. None of these
20	The negation of given number is a	A. Binary operation B. Unary operation C. Relation D. None of these