ECAT Pre General Science Mathematics Chapter 2 Set, Functions and Groups Online Test

Sr	Questions	Answers Choice
1	Question Image	A. An empty set B. Universal set C. A singleton set D. None of these
2	The set of rational numbers is subset of	A. The set of natural numbers B. The set of real numbers C. The set of integers D. The set of whole numbers
3	The set of all positive even integers is	A. Not a group B. A group w.r.t subtraction C. A group w.r.t division D. A group w.r.t multiplication
4	Question Image	
5	If x = 1/x for x ∈ R then the value of x is	A. ±1 B. 0 C. 2 D. 4
6	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
7	For any two sets A and, A ⊆ B if	A. x ∈ A ⇒ x ∈ B B. x ∉ A ⇒ x ∉ B C. x ∈ A ⇒ x ∉ B D. None of these
8	Question Image	
9	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. -2 -a D. None of these
10	The set of natural is a semi group w.r.t	A. Addition B. Division C. Subtraction D. None of these
11	The logic in which every statement is regarded as true or false and no other possibility is called	A. Aristotelian login B. Inductive logic C. Non-Aristotelian logic D. None of these
12	The set which has no proper subset is	A. {0} B. {} C. {∅} D. None of these
13	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
14	If p and q are two statements then their biconditional 'p if q' is denoted by	
15	The set { {a,b} } is	A. Infinite set B. Singleton set C. Two points set D. Empty set
16	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
		A. 36 +(-32)i

17	If z1 = 2 + 6i and z2 = 3 + 7i then which expression defines the product of z1 and z2	B. -36+32i C. 6+(-11)i D. 0, +(-12)i
18	Under multiplication, solution set of is	A. Groupoid B. Abelian group C. Semi group D. All of these
19	The many subset can be formed from the set {a,b,c,d}	A. 8 B. 4 C. 12 D. 16
20	The number of proper subset of A ={a.b.c.d} is	A. 3 B. 6 C. 8 D. 15