ECAT Mathematics Chapter 23

Sr	Questions	Answers Choice
1	if A = (x/x∈ Q^ 0 < x < 1}, the A is	A. Infinite set B. Finite set C. Set of rational numbers D. Set of real numbers
2	If there is one-one correspondence between A and B, then we write.	A. A = B B. A⊆ B C. A⊇ B D. A ~ B
3	*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
4	The set of months in a year beginning with S.	A. {September, October, November} B. Singleton set C. Null set D. Empty set
5	A = B iff	A. All elements of A also the elements of B B. A and B should be singleton C. A and B have the same number of elements D. If both have the same element
6	If P = {x/x = p/q where p,q∈ Z and q≠ 0}, then P is the set of	A. Irrational numbers B. Even numbers C. Rational numbers D. Whole numbers
7	If S = {3,6,9,12.....}, then	A. S = Four multiples of 3 B. S = Set of even numbers C. S = Set of prime numbers D. S = All multiples of 3
8	Which of the following is the definition of singleton	A. The objects in a set B. A set having no element C. A set having no subset D. None of these
9	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)
10	Which of the following statement is true?	A. A set is a collection of non-empty object B. A set is a collection of only numbers C. a set is any collection of things D. a set is well-defined collection of objects
11	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
12	The statement that a group can have more than one identity elements is	A. True B. False C. Ambiguous D. Some times true
13	The set {Z\{0}} is group w.r.t	A. Addition B. Multiplication C. Division D. Subtraction
14	The set R is _____ w.r.t subtraction	A. Not a group B. A group C. No conclusion drawn D. Non commutative group

15	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
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
17	The multiplicative inverse of -1 in the set {1-, 1} is	A. 1 B. -1 C. +-1 D. 0
18	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
19	Question Image	A. Addition B. Multiplication C. Division D. Both addition and multiplication
20	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