ECAT Mathematics Chapter 23

Sr	Questions	Answers Choice
1	The statement that a group can have more than one identity elements is	A. True B. False C. Fallacious D. Some times true
2	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
3	The set {1, -1, 1, -1}, form a group under	A. Addition B. Multiplication C. Subtraction D. None
4	The multiplicative inverse of -1 in the set {1-, 1} is	A. 1 B. -1 C. 0 D. Does not exist
5	The set of complex numbers forms a group under the binary operation of	A. Addition B. Multiplication C. Division D. Subtraction
6	The graph of a quadratic function is	A. Circle B. Ellipse C. Parabola D. Hexagon
7	The set of the first elements of the ordered pairs forming a relation is called its	A. Function on B B. Range C. Domain D. A into B
8	The set {{a,b}} is	A. Infinite set B. Singleton set C. Two points set D. None
9	Which of the following is the subset of all sets?	
10	In a school, there are 150 students. Out of these 80 students enrolled for mathematics class, 50 enrolled for English class, and 60 enrolled for Physics class. The students enrolled for English cannot any other class, but the students of mathematics and Physics can take two courses at a time. Find the number of students who have taken both physics and mathematics	A. 40 B. 30 C. 50 D. 20
11	Multiplicative inverse of "1" is	A. 0 B. -1 C. 1 D. {0, 1}
12	The multiplicative inverse of x such that x = 0 is	A. -x B. does not exist C. 1/x D. 0
13	The complement of set A relative to universal set U is the set	
14	Question Image	A. A = C B. A = B C. B = C D. None of these
15	Question Image	A. 4 B. 3 C. 2 D. 1
16	Question Image	
17	G = {e, a, b, c} is an Abelian group with e as identity element. The order of the other	A. 2, 2, 2 B. 3, 3, 3

	elements are	C. 2, 2, 4 D. 2, 3, 4
18	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
19	Question Image	
20	Question Image	D. none of these