ECAT Mathematics Chapter 2 Set, Functions and Groups

Sr	Questions	Answers Choice
1	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
2	Question Image	D. none of these
3	The set of first elements of the ordered pairs in a relation is called its	A. domain B. range C. relation D. function
4	To each element of a group there corresponds ..... inverse element	A. Two B. One C. No D. Three
5	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
6	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
7	Question Image	A. 1 B. 12 C. 5 D. 29
8	To each element of a group there corresponds _____ inverse element	A. Two B. One C. No D. Three
9	In set builder notation the set {0, 1, 2, ..., 100} can be written as	
10	A conditional is regarded as false only when the antecedent is true and consequent is	A. True B. False C. Known D. Unknown
11	The contra positive of $p \rightarrow q$ is	A. $q \rightarrow p$ B. $\sim q \rightarrow \sim q$ C. $\sim p \rightarrow \sim q$ D. None of these
12	The set of the first elements of the orders pairs forming a relations is called its	A. Relation in B B. Range C. Domain D. Relation in A
13	Question Image	
14	The set {{a,b}} is	A. Infinite set B. Singleton set C. Two points set D. None
15	Question Image	A. A B. A' C. U D. None of these
16	Question Image	A. 1/x B. -x C. 2x D. 0.5 x
17	Question Image	A. A B. A' C. U

		C. ∪ D. U'
18	Which symbolic notation represent unary operation ?	A. - B. ∨ C. ∧ D. ⇔
19	If #n = $(n-5)^2$+ 5, then find #3 x #4.	A. 54 B. 12 C. 4 D. 9
20	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