

## ECAT (Pre-Eng) Mathematics Chapter 2 Set, Functions and Groups

Sr	Questions	Answers Choice
1	For any set X, $X \cup X$ is	A. X B. $X'$ C. $\phi$ D. Universal Set
2	The graph of a quadratic function is	A. Circle B. Ellipse C. Parabola D. Hexagon
3	Question Image	A. A finite set B. An infinite set C. An empty set D. None of these
4	If P is a proposition then its negative is denoted by	
5	Question Image	
6	The set Q	A. Forms a group under addition B. Does not form a group C. Contains no additive identity D. Contains no additive inverse
7	The identity element of a set X with respect to intersection in $P(x)$ is	A. X B. Does not exist C. $\emptyset$ D. None of these
8	Question Image	
9	The set $\{Z \setminus \{0\}\}$ is group w.r.t	A. Addition B. Multiplication C. Division D. Subtraction
10	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)
11	Question Image	D. None of these
12	The multiplicative inverse of -1 in the set $\{-1, 1\}$ is	A. 1 B. -1 C. 0 D. Does not exist
13	The function $\{f(x,y)   y = ax^2 + bx + c\}$ is	A. One-one function B. Constant function C. Onto function D. Quadratic function
14	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
15	Question Image	A. Addition B. Subtraction C. Multiplication D. None of these
16	If the intersection of two sets is non-empty, but either is a subset of other are called	A. Disjoint sets B. Overlapping C. Equal sets D. None of these
17	Question Image	A. A = C B. A = B C. B = C D. ...

		D. None of these
18	If A is a subset of B and B contains at least one element which is not an element of A, then A is said to be	A. Improper subset of B B. Super set of B C. Proper subset of B D. None of these
19	The complement of set A relative to universal set U is the set	
20	$G = \{e, a, b, c\}$ 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