

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

Sr	Questions	Answers Choice
1	A function whose range is just one element is called	A. One-one function B. Constant function C. Onto function D. Identity function
2	Question Image	
3	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
4	Question Image	A. square root function B. identity function C. linear function D. quadratic function
5	If a 1-1 correspondence can be established b/w two sets A and B, then they are called	A. Equal sets B. Equivalent sets C. Overlapping sets D. None of these
6	The multiplicative inverse of -1 in the set $\{1, -1\}$ is	A. 1 B. -1 C. ± 1 D. 0 E. Does not exist
7	Which of the following sets is infinite	A. The set of students of your class B. The set of all schools in Pakistan C. The set of natural numbers between 3 and 10 D. The set of rational numbers between 3 and 10
8	Question Image	
9	If $B - A \neq \emptyset$, then $n(B - A)$ is equal to	A. $n(A) + n(C)$ B. $n(C) - n(A)$ C. $n(A) - n(C)$ D. None of these
10	If $f: A \rightarrow B$ is an injective function and second elements of no two of its ordered pairs are equal, then f is called	A. 1-1 and onto B. Bijective C. 1-1 and into D. None of these
11	Question Image	A. $A = B$ B. $B = C$ C. $A = C$ D. None of these
12	If a set S contains "n" elements then $P(S)$ has number of elements	A. 2^{n-1} B. 2^n C. $2 \cdot n$ D. 2^{n+1}
13	The many subset can be formed from the set $\{a, b, c, d\}$	A. 8 B. 4 C. 12 D. 16
14	Question Image	A. A is proper subset of B B. A is an improper subset of B C. A is equivalent to B D. B is subset of A
15	A disjunction of two statement p and q is true	A. p is false B. q is false C. Both p and q are false D. One of p and q is true
16	The set of natural is a semi group w.r.t	A. Addition B. Division C. Subtraction

		D. None of these
17	A monoid $(G, *)$ is said to be group if	A. have identity element B. is commutative C. have inverse of each element D. None of these
18	Additive inverse of $-a - b$ is	A. a B. $-a + b$ C. $a - b$ D. $a + b$
19	Power set of difference set N-W is	A. Empty set B. Infinite set C. Singleton set D. $\{0, \emptyset\}$
20	Question Image	