

ECAT Pre General Science Mathematics Chapter 2 Set, Functions and Groups Online Test

Sr	Questions	Answers Choice
1	Which symbolic notation represent unary operation ?	A. - B. \forall C. \wedge D. \leftrightarrow
2	Which conjunction is not true ?	
3	Power set of difference set N-W is	A. Empty set B. Infinite set C. Singleton set D. $\{0, \emptyset\}$
4	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. A onto B B. both a & c C. A into B D. none of these
5	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $a-b=ab$ B. $ab=a$ C. $a+b=ab$
6	Group of none-singular matrices under multiplication is	A. None-Abelian group B. Semi group C. Abelian group D. None of these
7	Z is a group under	A. Subtraction B. Multiplication C. Addition D. None of these
8	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
9	The extraction of cube root of a given number is a	A. Unary Operation B. Binary Operation C. Relation D. None of these
10	The negation of given number is a	A. Binary operation B. Unary operation C. Relation D. None of these
11	A conditional is regarded as false only when the antecedent is true and consequent is	A. True B. False C. Known D. Unknown
12	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
13	A conjunction of two statement p and q is true only if	A. p is true B. q is true C. Both p and q are true D. both p and q are false
14	$(A \cap B)^c =$ -----	A. $A^c \cup B^c$ B. $A^c \cup B$ C. $A^c \cap B$ D. None of these
15	For a set A, $A \cup A^c =$ -----	A. A B. \emptyset C. A ^c D. U
16	$A \cup (A \cap B) =$ -----	A. B B. A C. A \cup B D. A \cap B

		D. None of these
17	$(A \cup B) \cup C = \dots\dots\dots$	A. $A \cap B(B \cup C)$ B. $A \cup (B \cup C)$ C. $A \cup (B \cap C)$ D. None of these
18	If $B \subseteq A$, then complement of B in A is = $\dots\dots\dots$	A. $A - B$ B. $A \cap B$ C. $B - A$ D. $A \cup B$
19	If $A = B$, then	A. $A \subseteq B$ and $B \subseteq A$ B. $A \subseteq B$ and $B \not\subseteq A$ C. $A \subseteq B$ and $B \subseteq A$ D. None of these
20	The set X is	A. Proper Subset of X B. Not A subset of X C. Improper Subset of X D. None of these
21	The function whose range consists of just one element is called	A. One-One Function B. Identity Function C. Onto Function D. Constant Function
22	Question Image <input type="text"/>	D. None of these
23	The set of natural is a semi group w.r.t	A. Addition B. Division C. Subtraction D. None of these
24	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
25	The geometrical representation of a linear function is	A. Circle B. Parabola C. Straight line D. None of these
26	Question Image <input type="text"/>	A. Addition B. Subtraction C. Multiplication D. None of these
27	Question Image <input type="text"/>	D. None of these
28	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
29	Onto function is also called	A. Bijective function B. Injective function C. Surjective function D. None of these
30	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