

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

Sr	Questions	Answers Choice
1	Which symbolic notation represent unary operation ?	A. - B. \vee 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	A. A onto B B. both a & c C. A into B D. none of these
5	Question Image	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	$(A \cup B) \cup C = \text{-----}$	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 = -----	A. $A - B$ B. $A \cap B$ C. $B - A$ D. $A \cup B$
19	If $A=B$, then	A. $A \subset B$ and $B \subset A$ 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	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	A. Addition B. Subtraction C. Multiplication D. None of these
27	Question Image	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