


## ECAT Pre General Science Mathematics Chapter 4 Functions & Groups Online Test

Sr	Questions	Answers Choice
1	A semi-group having an identity is called a	A. groupoid B. non-commutative C. abelian D. monoid
2	Identity element, if it exists, is	A. inverse B. unique C. commutative D. associative
3	The set $\{E,0\}$ , is closed under (ordinary)	A. multiplication B. addition C. subtraction D. division
4	Addition is not operation on	A. Natural numbers B. Even numbers C. odd numbers D. set of integers
5	Extraction of square root of a given number is a	A. unary operation B. binary operation C. group D. inverse function
6	The extraction of a cube root of a given number is a	A. Binary operation B. Unary operation C. group D. multiplicative inverse
7	Negation of a given number is an example of	A. Binary operation B. group C. unary operation D. function
8	N is closed with respect to ordinary	A. addition B. multiplication C. addition and multiplication D. division
9	There will be no inverse if the function is	A. one -to - one B. One to many C. onto D. into
10	The inverse of a line is	A. inverse B. Line C. quadratic D. Circle
11	The function denoted by $1/f$ called the	A. Reciprocal function B. Inverse function C. Constant function D. Reverse function
12	A function $f$ will have an inverse function if and only if it is a	A. onto function B. into function C. Constant D. one-one function
13	$ax+by+c = 0$ , represents a	A. Circle B. Parabola C. Straight line D. Quadratic circle
14	The group of a constant line is	A. Vertical line B. Parabola C. Circle D. Horizontal line
15	A relation a into B in which Domain is not equal to a, is called.	A. Into function B. on to function C. None of these D. Surjective

16	If no two elements of ordered pairs of a function from A onto are the same, then it is called.	A. Surjective B. Injuctive C. Bijective D. on to
17	If no two elements of ordered pair of a functions from A into B are equal, then it is called.	A. Surjective B. Injuctive C. Bijective D. Onto
18	Function is a special type of	A. relation B. ordered pairs C. Cartesian product D. Set
19	$(a,b) = (c,d)$ if and only if	A. $a=b$ and $c=d$ B. $a = d$ and $b = c$ C. $a = c$ and $b = d$ D. $a - b = c - d$
20	The set of second elements of the ordered pairs forming a relation called a	A. Domain B. Range C. Function D. Relation
21	If A is non-empty set, any subset of $A \times A$ is called a relation in	A. A B. B C. $\emptyset$ D. r
22	The set of first elements of the ordered pairs forming the relation is called is	A. Domain B. Range C. Ordered paris D. Relation
23	The set of cartesian product $A \times B$ consists of	A. Domain B. Range C. Binary relation D. Ordered pair
24	Let A and B be two non-empty sets, then any subset of the cartesian product $A \times B$ called a	A. Function B. Domain C. Range D. Binary relation
25	The graph of a constant line is	A. vertical line B. parabola C. circle D. horizontal line
26	$ax+by+c = 0$ , represent a	A. circle B. parabola C. straight line D. quadratic circle
27	the function $y = mx+c$ is, called linear function, because	A. it has only two variables B. it has one variable C. its graphs is straight line D. its graphs is circle
28	A relation A into B in which Domain is not equal to A, is called	A. into function B. onto function C. None of these D. surjective
29		A. bijective function B. into function C. onto function D. surjective
30	Which of the following diagrams represent into function?	