

## ECAT Mathematics Chapter 4 Functions & Groups

Sr	Questions	Answers Choice
1	The graph of a constant line is	A. vertical line B. parabola C. circle D. horizontal line
2	Extraction of square root of a given number is a	A. unary operation B. binary operation C. group D. inverse function
3	Which of the following is surjective	
4	If the number of elements in set A is n, and in set B is m, then the number of elements in $A \times B$ will	A. $n <sup>m</sup>$ B. $m <sup>n</sup>$ C. $m \times n$ D. $m + n$
5	If no two elements of ordered pairs of a function from A onto are the same, then it is called.	A. Surjective B. Injunctive C. Bijective D. on to
6	Identity element, if it exists, is	A. inverse B. unique C. commutative D. associative
7	There will be no inverse if the function is	A. one -to - one B. One to many C. onto D. into
8	<div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">Question Image</div>	A. injunctive as well as surjective B. both onto and into C. one - one and into D. only (1 - 1)
9	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
10	$ax+by+c = 0$ , represent a	A. circle B. parabola C. straight line D. quadratic circle
11	Negation of a given number is an example of	A. Binary operation B. group C. unary operation D. function
12	$(a,b) = (c,d)$ if and only if	A. $a=b$ and $c =d$ B. $a = d$ and $b = c$ C. $a = c$ and $b = d$ D. $a - b = c -d$
13	Such a function which is (1 -1) is called	A. surjective B. injunctive C. bijective D. into
14	<div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">Question Image</div>	A. similar images B. distinct images C. similar range D. option a and c
15	If no two elements of ordered pair of a functions from A into B are equal, then it is called.	A. Surjective B. Injunctive C. Bijective D. Onto
16	The set of second elements of the ordered pairs forming a relation called a	A. Domain B. Range C. Function

		D. Relation
17	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
18	The inverse of a line is	A. inverse B. Line C. quadratic D. Circle
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 net of cartesian product $A \times B$ consists of	A. domain B. range C. binary relation D. ordered pair