

## ECAT Mathematics Chapter 4 Functions & Groups

Sr	Questions	Answers Choice
1	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. similar images B. distinct images C. similar range D. option a and c
2	(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. $a - b = c - d$
3	If no two elements of ordered pairs of a function from A onto B are the same, then it is called	A. surjective B. injective C. bijective D. on to
4	Function is a special type of	A. relation B. ordered pairs C. cartesian product D. sets
5	Identity element, if it exists, is	A. inverse B. unique C. commutative D. associative
6	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
7	A function f from A to B can be written as	
8	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
9	$ax+by+c = 0$ , represents a	A. Circle B. Parabola C. Straight line D. Quadratic circle
10	A function from A to B is called on-to function, if its range is	A. A B. B C. A and B D. neither A nor B
11	The set of first elements of the ordered pairs forming the relation is called is	A. Domain B. Range C. Ordered paris D. Relation
12	Which of the following represent injective function	
13	N is closed with respect to ordinary	A. addition B. multiplication C. addition and multiplication D. division
14	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. injective as well as surjective B. both onto and into C. one - one and into D. only (1 - 1)
15	The extraction of a cube root of a given number is a	A. Binary operation B. Unary operation C. group D. multiplicative inverse
16	If range of a function f is B, then the function is	A. surjective B. injective C. bijective D. into
17	Function is a special type of	A. relation B. ordered pairs C. Cartesian product D. sets

D. Set

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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.  $n^m$
- B.  $m^n$
- C.  $m \times n$
- D.  $m + n$

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Let A and B be two non-empty sets, then any subset of the cartesian product  $A \times B$  is called a

- A. function
- B. domain
- C. range
- D. binary relation

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Which of the following is surjective