

## ECAT Mathematics Chapter 4 Functions & Groups

Sr	Questions	Answers Choice
1	If no two elements of ordered pair of a functions from A into B are equal, then it is called.	A. Surjective B. Injective C. Bijective D. Onto
2	A function will have an inverse function if and only if it is a	A. onto function B. into function C. Constant D. one-one function
3	Identity element, if it exists, is	A. inverse B. unique C. commutative D. associative
4	$(a,b) = (c,d)$ if and only if	A. $a=b$ and $c=d$ B. $a = d$ and $b = c$ C. $a = c$ and $b = d$ D. $a - b = c - d$
5	The extraction of a cube root of a given number is a	A. Binary operation B. Unary operation C. group D. multiplicative inverse
6	Question Image	
7	The set $\{E, 0\}$ , is closed under (ordinary)	A. multiplication B. addition C. subtraction D. division
8	$ax+by+c = 0$ , represent a	A. circle B. parabola C. straight line D. quadratic circle
9	Function is a special type of	A. relation B. ordered pairs C. Cartesian product D. Set
10	The set of first elements of the ordered pairs forming the relation is called is	A. Domain B. Range C. Ordered pairs D. Relation
11	$ax+by+c = 0$ , represents a	A. Circle B. Parabola C. Straight line D. Quadratic circle
12	Which of the following diagrams represent into function?	
13	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. $m + n$
14	Which of the following represent injective function	
15	Question Image	A. similar images B. distinct images C. similar range D. option a and c
16	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
17	The set of second elements of the ordered pairs forming a relation called a	A. Domain B. Range C. Function D. pair

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- 18 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
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- 19 The graph of a constant line is
- A. vertical line  
B. parabola  
C. circle  
D. horizontal line
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- 20 Function is a special type of
- A. relation  
B. ordered pairs  
C. cartesian product  
D. sets
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