ECAT Mathematics Chapter 4 Functions & Groups Online Test

Sr	Questions	Answers Choice
1	Addition is not operation on	A. Natural numbers B. Even numbers C. odd numbers D. set of integers
2	N is closed with respect to ordinary	A. addition B. multiplication C. addition and multiplication D. division
3	If range of a function f is B, then the function is	A. surjective B. injuctive C. bijective D. into
4	Which of the following diagrams represent into function?	
5	If the number of elements in set A is n, and in set B is m, then the number of elements in AxB will	A. n^m B. mⁿ C. m x n D. m + n
6	If no two elements of ordered pairs of a function from A onto B are the same, then it is called	A. surjective B. injuctive C. bijective D. on to
7	The set of second elements of the ordered pairs forming a relation is called a	A. Domain B. range C. function D. relation
8	There will be no inverse if the function is	A. one -to - one B. One to many C. onto D. into
9	The set of first elements of the ordered pairs forming the relation is called its	A. domain B. range C. ordered paris D. relation
10	Question Image	
11	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
12	the function y = mx+c is, called linear function, because	A. it has only two variables B. it has one varible C. its graphs is straight line D. its graphs is circle
13	Question Image	A. bijective function B. into function C. onto function D. surjective
14	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
15	The set of cartesian product A x B consists of	A. Domain B. Range C. Binary relation D. Ordered pair
16	A function f from A to B can be written as	
17	Question Image	A. injuctive as well as surjective B. both onto and into C. one - one and into

		D. only (1 - 1)
18	Negation of a given number is an example of	A. Binary operation B. group C. unary operation D. function
19	Identity element, if it exists, is	A. inverse B. unique C. commutative D. associative
20	(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
21	The extraction of a cube root of a given number is a	A. Binary operation B. Unary operation C. group D. multiplicative inverse
22	The function denoted by 1/f called the	A. Reciprocal function B. Inverse function C. Constant function D. Reverse function
23	Which of the following is surjective	
24	Extraction of square root of a given number is a	A. unary operation B. binary operation C. group D. inverse function
25	The set of second elements of the ordered pairs forming a relation called a	A. Domain B. Range C. Function D. Relation
26	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
27	Which of the following diagrams represent bijective function?	
28	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
29	Function is a special type of	A. relation B. ordered pairs C. cartesian product D. sets
30	Such a function which is (1 -1) is called	A. surjective B. injuctive C. bijective D. into
31	The group of a constant line is	A. Vertical line B. Parabola C. Circle D. Horizontal line
32	If no two elements of ordred pair of a function from A into B are equal, then it is called	A. surjective B. injuctive C. bijective D. on to
33	arb mean	A. a is related to b B. b is related to a C. a is reciprocal of b D. a is not related to b
34	ax+by+c = 0, represent a	A. circle B. parabola C. straight line D. quadratic circle
35	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
36	The inverse of a line is	A. inverse B. Line C. quadratic

		D. Circle
37	The set {E,0}, is closed under (ordinary)	A. multiplication B. addition C. subtraction D. division
38	The set of first elements of the ordered pairs forming the relation is called is	A. Domain B. Range C. Ordered paris D. Relation
39	Function is a special type of	A. relation B. ordered pairs C. Cartesian product D. Set
40	ax+by+c = 0 , represents a	A. Circle B. Parabola C. Straight line D. Quadratic circle
41	Question Image	
42	Which of the following notation defines AxB	
43	The graph of a constant line is	A. vertical line B. parabola C. circle D. horizontal line
44	Let A and B be two non-empty sets, then any subset of the cartesian product A x B called a	A. Function B. Domain C. Range D. Binary relation
45	If A is non-empty set, any subset of AxA is called a relation in a	A. A B. B C. D D. r
46	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
47	(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
48	The identity function is	A. surjective B. injuctive C. bijective D. into
49	Let A and B be two non-empty sets, then any subset of the cartesian product AxB is called a	A. function B. domain C. range D. binary relation
50	If A is non-empty set, any subset of A x A is called a relation in	A. A B. B C. ⌀ D. r
51	The net of cartesian product AxB consists of	A. domain B. range C. binary relation D. ordered pair
52	Question Image	A. similar images B. distinct images C. similar range D. option a and c
53	Which of the following represent injuctive function	
54	A semi-group having an identity is called a	A. groupoid B. non-commutative C. abelian D. monoid