Mathematics ECAT Pre Engineering Chapter 4 Functions and Groups Online Test

Sr	Questions	Answers Choice
1	If range of a function f is B, then the function is	A. surjective B. injuctive C. bijective D. into
2	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
3	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
4	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
5	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
6	A function f from A to B can be written as	
7	ax+by+c = 0 , represents a	A. Circle B. Parabola C. Straight line D. Quadratic circle
8	The set of cartesian product A x B consists of	A. Domain B. Range C. Binary relation D. Ordered pair
9	The set of first elements of the ordered pairs forming the relation is called is	A. Domain B. Range C. Ordered paris D. Relation
10	(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
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	There will be no inverse if the function is	A. one -to - one B. One to many C. onto D. into
13	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
14	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
15	The inverse of a line is	A. inverse B. Line C. quadratic D. Circle
16	Question Image	A. injuctive as well as surjective B. both onto and into C. one - one and into

		D. only (1 - 1)
17	Question Image	A. bijective function B. into function C. onto function D. surjective
18	The set of second elements of the ordered pairs forming a relation called a	A. Domain B. Range C. Function D. Relation
19	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
20	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
21	The net of cartesian product AxB consists of	A. domain B. range C. binary relation D. ordered pair
22	If A is non-empty set, any subset of A x A is called a relation in	A. A B. B C. ⌀ D. r
23	Which of the following is surjective	
24	The group of a constant line is	A. Vertical line B. Parabola C. Circle D. Horizontal line
25	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
26	Which of the following diagrams represent into function?	
27	The set {E,0}, is closed under (ordinary)	A. multiplication B. addition C. subtraction D. division
28	Which of the following diagrams represent bijective function?	
29	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
30	Identity element, if it exists, is	A. inverse B. unique C. commutative D. associative
31	The function denoted by 1/f called the	A. Reciprocal function B. Inverse function C. Constant function D. Reverse function
32	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
33	If A is non-empty set, any subset of AxA is called a relation in a	A. A B. B C. D D. r
34	The set of first elements of the ordered pairs forming the relation is called its	A. domain B. range C. ordered paris D. relation
35	Addition is not operation on	A. Natural numbers B. Even numbers C. odd numbers D. set of integers
		A. a=b and c =d

36	(a,b) = (c,d) if and only if	B. a = d and b = c C. a = c and b = d D. a - b = c -d
37	Question Image	
38	The extraction of a cube root of a given number is a	A. Binary operation B. Unary operation C. group D. multiplicative inverse
39	The graph of a constant line is	A. vertical line B. parabola C. circle D. horizontal line
40	Which of the following represent injuctive function	
41	Question Image	
42	ax+by+c = 0, represent a	A. circle B. parabola C. straight line D. quadratic circle
43	Function is a special type of	A. relation B. ordered pairs C. Cartesian product D. Set
44	Negation of a given number is an example of	A. Binary operation B. group C. unary operation D. function
45	N is closed with respect to ordinary	A. addition B. multiplication C. addition and multiplication D. division
46	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
47	The set of second elements of the ordered pairs forming a relation is called a	A. Domain B. range C. function D. relation
48	Such a function which is (1 -1) is called	A. surjective B. injuctive C. bijective D. into
49	A semi-group having an identity is called a	A. groupoid B. non-commutative C. abelian D. monoid
50	Which of the following notation defines AxB	
51	Question Image	A. similar images B. distinct images C. similar range D. option a and c
52	Function is a special type of	A. relation B. ordered pairs C. cartesian product D. sets
53	The identity function is	A. surjective B. injuctive C. bijective D. into
54	Extraction of square root of a given number is a	A. unary operation B. binary operation C. group D. inverse function