Mathematics ECAT Pre Engineering Chapter 4 Functions and Groups Online Test

Sr	Questions	Answers Choice
1	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
2	The net of cartesian product AxB consists of	A. domain B. range C. binary relation D. ordered pair
3	The set of first elements of the ordered pairs forming the relation is called its	A. domain B. range C. ordered paris D. relation
4	If A is non-empty set, any subset of AxA is called a relation in a	A. A B. B C. D D. r
5	The set of second elements of the ordered pairs forming a relation is called a	A. Domain B. range C. function D. relation
6	Which of the following notation defines AxB	
7	(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
8	Question Image	
9	Question Image	
10	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
11	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
12	A function f from A to B can be written as	
13	Function is a special type of	A. relation B. ordered pairs C. cartesian product D. sets
14	Question Image	A. similar images B. distinct images C. similar range D. option a and c
15	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
16	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
17	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
18	Which of the following is surjective	

19	If range of a function f is B, then the function is	A. surjective B. injuctive C. bijective D. into
20	The identity function is	A. surjective B. injuctive C. bijective D. into
21	Such a function which is (1 -1) is called	A. surjective B. injuctive C. bijective D. into
22	Which of the following represent injuctive function	
23	Which of the following diagrams represent bijective function?	
24	Question Image	A. injuctive as well as surjective B. both onto and into C. one - one and into D. only (1 - 1)
25	Which of the following diagrams represent into function?	
26	Question Image	A. bijective function B. into function C. onto function D. surjective
27	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
28	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
29	ax+by+c = 0, represent a	A. circle B. parabola C. straight line D. quadratic circle
30	The graph of a constant line is	A. vertical line B. parabola C. circle D. horizontal line
31	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
32	The set of cartesian product A x B consists of	A. Domain B. Range C. Binary relation D. Ordered pair
33	The set of first elements of the ordered pairs forming the relation is called is	A. Domain B. Range C. Ordered paris D. Relation
34	If A is non-empty set, any subset of A x A is called a relation in	A. A B. B C. ∅ D. r
35	The set of second elements of the ordered pairs forming a relation called a	A. Domain B. Range C. Function D. Relation
36	(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
37	Function is a special type of	A. relation B. ordered pairs C. Cartesian product D. Set
		A. Surjective

38	If no two elements of ordered pair of a functions from A into B are equal, then it is called.	B. Injuctive C. Bijective D. Onto
39	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
40	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
41	The group of a constant line is	A. Vertical line B. Parabola C. Circle D. Horizontal line
42	ax+by+c = 0 , represents a	A. Circle B. Parabola C. Straight line D. Quadratic circle
43	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
44	The function denoted by 1/f called the	A. Reciprocal function B. Inverse function C. Constant function D. Reverse function
45	The inverse of a line is	A. inverse B. Line C. quadratic D. Circle
46	There will be no inverse if the function is	A. one -to - one B. One to many C. onto D. into
47	N is closed with respect to ordinary	A. addition B. multiplication C. addition and multiplication D. division
48	Negation of a given number is an example of	A. Binary operation B. group C. unary operation D. function
49	The extraction of a cube root of a given number is a	A. Binary operation B. Unary operation C. group D. multiplicative inverse
50	Extraction of square root of a given number is a	A. unary operation B. binary operation C. group D. inverse function
51	Addition is not operation on	A. Natural numbers B. Even numbers C. odd numbers D. set of integers
52	The set {E,0}, is closed under (ordinary)	A. multiplication B. addition C. subtraction D. division
53	Identity element, if it exists, is	A. inverse B. unique C. commutative D. associative
54	A semi-group having an identity is called a	A. groupoid B. non-commutative C. abelian D. monoid