ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Question Image	
2	x = 1 is in the solution of the inequality	A. x + 1 > 0 B. x - 2 > 0 C. 3x - 1 < 0 D. x + 2 < 0
3	If the roots of $ax^2 + bx + c = 0$ are equal in magnitude but opposite in sign, then	A. a = 0 B. b = 0 C. c = 0 D. None of these
4	The set of the first elements of the ordered pairs forming a relation is called its	A. Function on B B. Range C. Domain D. A into B
5	A function f from A to B can be written as	
6	A matrix with a single column is called	A. Column matrix B. Row matrix C. Identity matrix D. Null matrix
7	The solution set of sin x + cos x = 0 is	
8	5 unbiased coins coins are tossed simultaneously. The probability of getting at least one head is	A. 1 / 32 B. 31 / 32 C. 1 / 16 D. None of these
9	The value of k (k > 0) for which the equation $x^2 + kx + 64 = 0$ and $x^2 - 8x + k = 0$ both will have real roots is	A. 8 B. -16 C. -64 D. 16
10	$4/\sqrt{49}$ is a	A. Irrational Number B. Prime Number C. Rational number D. Whole number
11	In R, the additive identity is	A. 0 B. 1 C. -1 D. None
12	If $f(x) = -x^2$ then f(-2) is	A. -2 B. 2 C. -4 D. 4
13	Question Image	
14	The key for opening a door is in a bunch of 10 keys. A man attempts to open the door by trying the keys at random discarding the wrong key. The probability that the door is opened in the 5th trial is	A. 1 / 10 B. 2 / 10 C. 3 / 10 D. 4 / 10
15	The real numbers which satisfy an inequality form its	A. solution B. coefficient C. domain D. range
16	2π is the period of	A. sin□ B. tan□ C. cot□ D. all circular function
17	The vertex of the cone is also called	A. nappes B. axis C. rulings D. apex
		A. Differential equation

18	An equation in which at least one term contains dy/dx, d^2 y /dx^2etc, is called.	B. Initial condition C. General solution D. Singular equation
19	Write the first four terms of the sequence if $a_n = (-1)^n n^2$	A. -1, 4, -9, 16 B. 1, -4, 9, 16 C. 1, 4, 9, 16 D. None of these
20	Question Image	A. 2 B. 7 C. 8 D. 12