ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	For a square matrix A, if $A = A^t$, then A is called	A. matrix B. Transpose C. Symmetric D. Non-symmetric
2	x = _____ is in the solution of 2x - 5 > 0	A. 0 B. 2 C. -2 D. 3
3	i^2 =	A. 1 B. 2 C. -1 D. 0
4	In a school there are 150 students Out of these 80 students enrolled for mathematics class.50 enrolled for English class and 60 enrolled for Physics class The student enrolled for English cannot attend any other class but the students of mathematics and Physics can take two courses at a time find the number of students who have taken both physics and mathematics.	A. 40 B. 30 C. 50 D. 60
5	Question Image	A. The law of sines B. The law of consines C. The law of tangents D. None of these
6	The set {-1,1} is closed under the binary operation of	A. Addition B. Multiplication C. Subtraction D. Division
7	If $y = (7x + 9)^2$, then dy/dx equals:	A. 98x +126 B. 14x C. 14x +18 D. 14x+81
8	Question Image	
9	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
10	The expansion of $(1 - 3x)^{-1}$ is valid if	A. | x | < 1 B. | x | < 3 C. | x | < 1/3 D. None of these
11	Every real number is	A. a positive integer B. a rational number C. a negative integer D. a complex number
12	0.25 is _____	A. An irrational number B. A natural number C. A prime number D. A rational number
13	The probability that a slip of number divisible by 4 is picked from the slips bearing numbers 1, 2, 3, ...10 is	A. 1/5 B. 1/4 C. 1/3 D. 1/2
14	If a plane passes through the vertex of the cone, then the intersection is	A. an ellipse B. a parabola C. a hyperbola D. a point circle
15	Question Image	A. An upper triangular matrix B. A lower triangular matrix C. A diagonal matrix D. A null matrix
		A. a,a = a²

16	If in a set of real no a is multiplicative identity then	B. a,a = 1 C. a,a = 0 D. None of these
17	Which element is the additive inverse of (a, b) in Complex numbers?	A. (a, 0) B. (0, b) C. (a, b) D. (-a, -b)
18	Question Image	A. π B. 2π C. π/2 D. None of these
19	The coordinates of a point which trisects segment joining (0,0) and (9,12) are:	A. (4,3)(8,6) B. (4,3)(6,8) C. (3,4)(6,8) D. (3,4)(8,6)
20	The logic in which every statement is regarded as true or false and no other possibility is called	A. Aristotelian login B. Inductive logic C. Non-Aristotelian logic D. None of these