ECAT Pre General Science Mathematics Online Test

Sr	Questions	Answers Choice
1	0 is a symbol of	A. singleton set B. Empty set C. Equivalent set D. Infinite set
2	Two quadratic equation in which xy term is missing and the coefficients of $x^2$and $y^2$are equal, give a linear equation by _____	A. Addition B. Subtraction C. Multiplication D. Division
3	A bag contains 7 whit, 5 black and 4 rd balls. If two balls are drawn at random from the bag, the probability that they are not of the same color is	A. 73 / 120 B. 83 / 120 C. 67 / 120 D. 43 / 120
4	Question Image	
5	If the intersection of two sets is non-empty, but either is a subset of other are called	A. Disjoint sets B. Over lapping C. Equal sets D. None of these
6	Question Image	A. A⁻ B. A^t C. -A D. A
7	Question Image	
8	1^0= _____	
9	In 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. 20
10	Let P(x_1, y_1) and Q(x_2, y_2) be two points in the co-ordinate plane. Let d = distance between P and Q	
11	If a≠ , b≠ 0 and|a=b|=|a-b|,then vectors a and b are:	A. Parallel to each other B. Perpendicular to each other C. Inclined at 60^o D. neither parallel nor perpendicular
12	Z is a group under	A. Subtraction B. Multiplication C. Addition D. None of these
13	n different objects can be arranged taken all at a time in _____	A. (n + 1)! ways B. (n - 1)! ways C. n! ways D. n ways
14	If n is a positive integer then n! is	A. (n - 1) (n - 2) .....3,.2.1 B. n(n - 1) (n - 2) ...3.2.1 C. n(n - 1) (n -2) ... 3 D. None of these
15	Question Image	A. images B. pre-images C. constants D. none of these
16	Question Image	A. 28 / 81 B. 28 / 243 C. 81 / 28 D. 243 / 82
17	Question Image	A. 5x^{4 + c} B. 1/6 x⁶+ c C. 5x²+ c

		D. 1/5 x⁶+ c
18	xy= 2 is:	A. a constant function B. an identity function C. an improper function D. implicit function
19	Apollonius was a:	A. Rocket B. Muslims scientist C. Greek mathematicians D. Method of finding conics
20	Question Image	