ECAT Pre General Science Mathematics Online Test

Sr	Questions	Answers Choice
1	Question Image	A. 15 B. 15 i C. -15 i D. -15
2	The quadratic equation 8 sec2θ - 6 secθ +1 =0 has	A. Infinitely many roots B. Exactly two roots C. Exactly four roots D. No roots
3	2x + 3y > 4 is a linear inequality in	A. one variable B. two variables C. three variables D. none of these
4	A diagonal matrix is always	A. Identity B. Triangular C. Scalar D. Non-singular
5	The decimal fraction in which we have finite number of digits in its decimal part is called.	A. recurring decimal fraction B. Non terminating faction C. Non recurring fraction D. terminating decimal fraction
6	If a set S contains n elements then P (S) has ..... number of elements	A. 2ⁿ B. 2ⁿ² C. 2.n D. n²
7	The point on $y^2 = 4ax$ nearest to the focus has its abciassae equal to	A. -a B. a C. a/2 D. 0
8	Archimedes approximate the function by horizontal function and the area under f by the sum of small	A. Parallelograms B. Squares C. Retangles D. Polygons
9	The contra positive of p → q is	A. q → p B. ~q→~q C. ~p→~q D. None of these
10	The set of ordered pairs (x,y) such that ax+ by < c, and (x,y) such that ax + by>0, are called	A. Half planes B. Boundary C. Linear Inequalities D. Feasible regions
11	For a square matrix A, if $A = A^t$, then A is called	A. matrix B. Transpose C. Symmetric D. Non-symmetric
12	Question Image	A. a tan(ax + b) + c B. - a tan(ax + b) + c
13	Question Image	A. 1 B. -i C. i D. 0
14	Question Image	
15	Which of the following does not represent absolute value of a vector	A. magnitude B. length C. norm D. number
16	Question Image	
17	The difference of two consecutive terms of an A.P is called the	A. Common difference B. Common ratio

17	The difference of two consecutive terms of an A.P is called the	C. Geometric series D. Geometric mean
18	Question Image	
19	Question Image	
20	cos (α+β) + cos (α-β) =	A. 4 cosαcosβ B. 2 cosαcosβ C. 2 sinαsinβ D. 2 sinαcosβ