

ECAT Pre General Science Mathematics Online Test

Sr	Questions	Answers Choice
1	The expression $x^2 - x + 1$ has	A. One proper linear factor B. No proper linear factor C. Two proper linear factors D. None of these
2	The distance of the point (2,3) from y-axis is	A. 2 B. 3 C. 5
3	The range of $y = \sin x$ is _____	A. [1, -1] B. [-1, 1] C. [0, -1] D. [-<i>∞</i>+<i>∞</i>]
4	The roots of $(x - a)(x - b) = abx^2$ are always	A. Real B. Depends upon a C. Depends upon b D. Depends upon a and b
5	Question Image	D. none of these
6	Two coins are tossed twice each. The probability that the head appears on the first toss and the same forces appear in the two tosses is	A. $\frac{1}{4}$ B. $\frac{1}{2}$ C. $\frac{1}{3}$ D. $\frac{1}{7}$
7	Question Image	A. 5 B. 10 C. 20 D. 30
8	Question Image	A. 0 B. 1 C. 2 D. 3
9	Question Image	A. 0 B. 1
10	$5x^3 + 3x -$ is a _____	A. Polynomial of degree 3 B. Polynomial of degree 2 C. Polynomial of degree 1 D. Polynomial of degree 0
11	For each even natural number n $(n^2 - 1)$ is divisible by	A. 6 B. 3 C. 4 D. 8
12	Question Image	D. none of these
13	An airplane flying at height of 300 meters above the ground passes vertically above another plane at an instant when the angle of elevation of the two planes from the same point on the ground are 60° and 45° respectively. Then the height of the lower plane from the ground is (in meters).	
14	Question Image	A. 360° B. 180° C. 90° D. None of these
15	Question Image	A. $-\cot 4x + c$ B. $\cot 4x + c$ C. $\tan 4x + c$ D. $-\tan 4x + c$

$$D. -\tan 4x + c$$

16	The angle of depression of the point at a distance 70 meters from the foot of the tower from the top of the tower is 45° . The height of the tower is	A. 37m B. 97m C. 101m D. 70m
17	$i^2 =$	A. 1 B. 2 C. -1 D. 0
18		A. -3 B. -7 C. 1 D. 0
19	$i =$	A. $\sqrt{1}$ B. $\sqrt{2}$ C. $\sqrt{-2}$ D. $\sqrt{-1}$
20	6 is	A. A prime integer B. An irrational number C. A rational number D. An odd integer