

ECAT Mathematics Online Test

Sr	Questions	Answers Choice
1	A sequence having no last term is called	A. arithmetic sequence B. Geometric sequence C. Finite sequence D. Infinite sequence
2	If $\cos \alpha = 4/5$, then $\cos \alpha/2$	
3	For three consecutive terms in A.P middle term is called	A. A.M B. nth term C. Central term D. None of these
4	If 6th term of a series in A.P, is -2 and 8th term is -8, the first term of the serie is	A. 13 B. -13 C. 18 D. -10
5	$\forall x, y \in \mathbb{R}$ and $x > 0, y > 0$, if $x > y$	D. None of these
6	Question Image	
7	Question Image	
8	If distance of (a,b) from origin is 5 then	A. $a^2 + b^2 = 5$ B. $a = 5$ C. $b = 5$
9	Domain of cosh x is	A. $\mathbb{R}$ B. $\mathbb{R} - \{0\}$ C. $[1, \infty)$ D. $[0, \infty)$
10	The conic is a parabola if	A. $e < 1$ B. $e > 1$ C. $e = 1$ D. None of these
11	Which of the following is a vector.	A. energy B. force C. work D. power
12	With usual notations $b^2 = a^2 + c^2 - 2ac \cos$ is called_____;	A. None of these B. Law of sines C. Law of cosines D. Law of tangents
13	(1, 1) is the in the solution of the inequality	A. $3x + 4y > 3$ B. $2x + 3y < 2$ C. $4x = 3y > 5$ D. $2c - 3y > 2$
14	If a set S contains n elements then P (S) has number of elements	A. 2^n B. 2^{n-1} C. 2.n D. n^{2^n}
15	Question Image	
16	If $3x^4 + 4x^3 + x^5$ is divided by $x+1$, which of the following is the remainder	A. 7 B. -2 C. 6 D. 1
17	If (a, b) is the mid-point of a chord passing thro' the vertex of the parabola $y^2 = 4x$, then	A. $a = 2b$ B. $2a = b$ C. $a^2 = 2b$ D. $2a = b^2$
18	$3/4$ is _____	A. An odd number B. An even number C. A natural number

D. A rational number

19

Question Image

- A. Square matrix
- B. Row matrix
- C. Symmetric matrix
- D. Null matrix

20

Question Image