

ECAT Pre General Science Mathematics Online Test

Sr	Questions	Answers Choice
1	Question Image	A. Reciprocal equation B. Exponential equation C. Radical equation D. None of these
2	A sequence having no last term is called	A. arithmetic sequence B. Geometric sequence C. Finite sequence D. Infinite sequence
3	Question Image	
4	If $b^2 - 4ac$ is positive then the roots of the equation are	A. Real B. Imaginary C. Positive D. Negative
5	The velocity of a particle moving along a straight line is given by $v = 3t + t^2$. The acceleration of the particle after 4 seconds from the start is	A. 4 B. 11 C. 26 D. None
6	If $x^3 - x^2 + 5x + 4$ is divided by $x - 2$, then the remainder is	A. 0 B. 2 C. 18 D. 14
7	Question Image	A. direction ratios B. direction cosines C. direction angles D. none of these
8	The number of triplets (x, y, z) satisfying $\sin^{-1}x + \cos^{-1}y + \sin^{-1}z = 2\pi$ is	A. 0 B. 2 C. 1 D. Infinite
9	Question Image	A. 0 B. 1 C. 2 D. 4
10	Question Image	A. $[0, 0, 0]$ B. $[1, 0, 0]$ C. $[0, 1, 0]$ D. $[0, 0, 1]$
11	Question Image	
12	The 31 term of the A.P 5,2,-1.....is	A. -82 B. 82 C. 85 D. -85
13	If all members of a sequence are real numbers then it is called a	A. Series B. Function C. Real sequence D. Range
14	For non-trivial solution $ A $ is	A. $A = 0$ B. $A \leq 0$ C. $ A = 0$ D. None of these
15	$\tan(\pi - \theta) =$ _____	A. $-\sin$ B. $-\tan$ C. $\sin$ D. $\tan$

C. $-\cos\theta$
D. $-\cot\theta$

16 An integral of $1/x$ dx is:

- A. $1/x^2$
B. $1/-x^2$
C. $1/\ln x$
D. $\ln x$

17 A cone is generated by all lines through a fixed point and the circumference of

- A. a Circle
B. an ellipse
C. a Hyperbola
D. None of these

18 Question Image

- A. (1, 3)
B. (-1, -3)
C. (1, -3)
D. (-1, 3)

19 if $A = \{x/x \in \mathbb{Q} \wedge 0 < x < 1\}$, the A is

- A. Infinite set
B. Finite set
C. Set of rational numbers
D. Set of real numbers

20 The value of $\sin^{-1} 24/25$ is equal to

- A. $\csc^{-1} 25/24$
B. $\sec^{-1} 24/25$
C. $2 \tan^{-1} 4/5$
D. $2\cos^{-1} 24/25$