

ECAT Pre General Science Mathematics Online Test

Sr	Questions	Answers Choice
1	The curve $f(x,y) = 0$ has a central symmetry if	A. $f(-x,-y)=f(x,y)$ B. $f(x,-y)=f(x,y)$ C. $f(-x,y)=f(x,y)$ D. $f(-x,-y)\neq f(x,y)$
2	The vertex of the equation $y^2 = 4ax$ is:	A. (2, -2) B. (1,1) C. (0 , 0) D. (2 , 2)
3	The points (5, -4, 2),(4, -3, 1),(7, -6, 4),(8, -7, 5) are vertices of a	A. Square B. Parallelogram C. Rectangle D. Rhombus
4	If $\underline{u} = 2\underline{i} + p\underline{j} + 5\underline{k}$ and $\underline{v} = 3\underline{i} + \underline{j} + p\underline{k}$ are perpendicular , then $p =$	A. 1 B. 2 C. -1 D. -3
5	Question Image	
6	Fundamental law is	
7	The area between the x-axis and the curve $y = x^2 + 1$ from $x = 1$ to 2 is:	A. 15/6 B. 15/4 C. 10/4 D. 10/3
8	$\cos(a + \beta) - \cos(a - \beta) =$ _____;	A. $2\cos a \cos \beta$ B. $2\sin a \cos \beta$ C. -25 in a $\cos \beta$ D. $-2\sin a \sin \beta$
9	One root of the equation $\cos x - x + 1/2 = 0$ lies in the interval	
10	Question Image	A. (-6,4) B. (-3,2) C. (6,-4) D. (3, -2)
11	For all points (x,y) in fourth quadrant	A. $x \geq 0, y \leq 0$ B. $x \geq 0, y \geq 0$ C. $x \leq 0, y \leq 0$ D. $x \leq 0, y \geq 0$
12	The value of i^{4n+1}	A. 1 B. -1 C. i D. $i^{>2}$
13	Find the next two terms of 7, 9, 12, 16,...	A. 18, 20 B. 19, 22 C. 20, 25 D. 21, 27
14	The central angle of an arc of a circle whose length is equal to the radius of the circle is called one	A. Degree B. Second C. Minute D. Radian
15	Question Image	A. (1,7/3) B. (1, 7/5) C. (1, 11/7) D. (1, 3/5)
16	1 is not	A. Real number B. Natural number C. Prime Number D. Whole Number
17	If A is a subset of B and B contains at least one element which is not an element of A, then A is said to be	A. Improper subset of B B. Super set of B C. Proper subset of B D. ...

D. None of these

18

Question Image

- A. -3
- B. -7
- C. 1
- D. 0

19

Question Image

- A. $c = 0$
- B. $c = -1$
- C. $c = -2$
- D. $c = 1$

20

Question Image