

ECAT Mathematics Online Test

Sr	Questions	Answers Choice
1	If P is a proposition then its negative is denoted by	
2	Question Image	A. A, B, C are coincident B. A, B, C are collinear C. Both A and B D. None of these
3	Question Image	
4	Question Image	
5	$\tan(3\pi/2 + \theta) = \underline{\hspace{1cm}}$;	A. $\tan\theta$ B. $\cot\theta$ C. $-\tan\theta$ D. $-\cot\theta$
6	Two circles are said to be concentric if they have	A. same radius B. same chord C. same centre D. same diameter
7	The function $\{f(x,y) y = ax^2 + bx + c\}$ is	A. One-one function B. Constant function C. Onto function D. Quadratic function
8	The projections of a line segment on x, y, z axes are 12, 4, 3. The length and the direction cosines of the line segment are	
9	Question Image	A. 9 B. -9 C. 0 D. 1
10	A square matrix A for which $A^t = A$ is called a	A. Column matrix B. Symmetric matrix C. Skew-symmetric matrix D. Row matrix
11	Question Image	
12	Question Image	
13	Question Image	
14	The sum of the focal distance from any point on the ellipse $9x^2 + 16y^2 = 144$ is	A. 32 B. 16 C. 18 D. 8
15	Question Image	A. Singular B. Non-singular C. Adjoint D. None of above
16	Question Image	A. images B. pre-images C. constants D. none of these
17	$3.5 + 5.4 = 5.4 + 3.5 = 8.9$ this property of addition is called	A. additive identity B. associative property C. commutative property D. closure property
18	The common ration of a geometric sequence cannot be	A. 0 B. 1 C. 2 D. 3
19	Question Image	

A. $y \pm 1 = 0$

- B. $x \pm 1 = 0$
 - C. $x \pm y = 0$
 - D. None of these
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