

ECAT Pre General Science Mathematics Online Test

Sr	Questions	Answers Choice
1	Question Image	A. -1 B. 0 C. 1 D. None of these
2	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
3	Question Image	
4	Let A,B, and C be any sets such that $A \cup B = A \cup C$ and $A \cap B = A \cap C$ then	A. $A \neq C$ B. $B = C$ C. $A = B$ D. $A \neq B$
5	Question Image	A. 1 B. -1 C. 5 D. 2
6	Question Image	
7	Question Image	A. $f(x) = x^{>2}$ B. $f(x^{>2}) = x$ C. $f(x) = x$ D. none of these
8	The period of the function $f(x) = \sin^4 x + \cos^4 x$ is	A. <i>π</i> B. <i>π</i> C. <i>π</i> D. None of these
9	$x^2 + x - 5 = 0$ is	A. A polynomial B. An inequality C. An identity D. None
10	The measure of the angle subtended at the centre of the circle by an arc, whose length is equal to the radius of the circle is	A. $1^{>0}$ B. 1' C. 1" D. 1 rad
11	A point where two of its boundary lines intersect is called	A. Corner point B. Feasible point C. Vertex D. Feasible solution
12	Question Image	A. 2 B. 4 C. 8 D. 16
13	Coordinates of the focus of the parabola $x^2 - 4x - 8y - 4 = 0$ are:	A. (0,2) B. (0,1) C. (2,0) D. (1,2)

14	Question Image	
15	If $f(\sqrt{x}) = \sin x$, then $f'(x) =$ _____;	A. $2x\cos x^2$ B. $\cos x^2$ C. $\cos \sqrt{x}$ D. None of these
16	Question Image	
17	$f(x) = ax + b$ will be an identity function if	A. $a = 1, b = 1$ B. $a = 1, b = 0$
18	Question Image	
19	The centre of the conic $x^2 + 16x + 4y^2 - 16y + 76 = 0$ is	A. (0,10) B. (-8,4) C. (-8,-2) D. (1,1)
20	Range of $\sin \theta$ is	