

ECAT Pre General Science Mathematics Online Test

Sr	Questions	Answers Choice
1	Question Image	A. Does not exist because f is unbounded B. Is not attained even though f is bounded C. Is equal to 1 D. Is equal to -1
2	The set $\{-1, 1\}$ is	A. Group under the multiplication B. Group under addition C. Does not form a group D. Contains no identity element
3	$f(x) = 1$ is	A. identity function B. constant function C. linear function D. quadratic function
4	The probability that the sum of dots appearing in two successive thrown of two dice, in every time 7 is	A. $\frac{1}{5}$ B. $\frac{1}{36}$ C. $\frac{1}{7}$ D. $\frac{1}{63}$
5	Question Image	A. Set of whole number B. Rational Numbers C. Complex numbers D. Whole numbers
6	The radius of the circle $x^2 + y^2 - 6x + 4y + 13 = 0$, is	A. 1 B. 2 C. 0 D. None of these
7	Question Image	
8	The exact degree value of the function $\sin^{-1}(\frac{\sqrt{3}}{2})$ is	A. 70° B. 50° C. 90° D. 60°
9	Question Image	
10	Question Image	
11	The ratio in which the line $y - x + 2 = 0$ divides the line joining (3,-1) and (8,9) is	A. 2:3 B. -2:3 C. 3:2 D. -3:2
12	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. None of these
13	The distance between the points A(3,1) and B(-2,-4) is	A. 5 C. 25 D. 10
14	Question Image	
15	Question Image	
16	Cofactor of an element a_{ij} denoted by A_{ij} is	A. $(-1)^{i+j}$ B. M_{ij} C. $(-1)^{i+j} M_{ij}$ D. None of above
17	The proposition $S(n)$ for any $n \in \mathbb{N}$ is only true if $k \in \mathbb{N}$ and	A. $S(k+1)$ is true B. $S(1)$ is true and $S(k+1)$ is true whenever $S(k)$ is true C. $S(k+1)$ is true whenever $S(k)$ is true D. $S(k)$ is true
		A. Rule of quotient of fraction

18	Question Image	B. Golden rule of fraction C. Rule for product of fraction D. Principle for equality of fraction
19	probability of a certain event is	A. 0 B. -1 C. 1 D. ∞
20	If $x-2$ and $x-1$ both are factors of $x^3-3x^2+2x-4p$, then P must equal to	A. 1 B. 2 C. 0 D. -2