

ECAT Pre General Science Mathematics Online Test

Sr	Questions	Answers Choice
1	Name the property used in a $(b-c) = ab - ac$	A. commutative property of multiplication B. distributive property of multiplication C. associative property of multiplication D. multiplicative inverse
2	The function $f\{(x, y) y = ax^2 + bx + c\}$ is	A. One-one function B. Constant function C. Onto function D. Quadratic function
3	A function f is said to be an even if $f(-x) =$	A. 0 B. 1 C. $f(x)$ D. $-f(x)$
4	$\sin(2\sin^{-1}0.8)$	A. 0.56 B. 0.69 C. -0.16 D. 0.96
5	The parabola $y^2 = 4ax$ open up if	A. $a < 0$ B. $a \neq 0$ C. $a > 0$ D. All are incorrect
6	$\frac{3}{2}$ is	A. An irrational number B. Whole number C. A positive integer D. A rational number
7	If S_n is a definite number as $n \rightarrow \infty$, then the geometric series is	A. Convergent B. Divergent C. Oscillatory D. None of these
8	$n(n-1)(n-2)$ in factorial form is	
9	The set of even prime numbers is	A. $\{2, 4, 6, 8, 10\}$ B. $\{2, 4, 6, 8, 10, 12\}$ C. $\{1, 3, 5, 7, 9\}$ D. $\{2\}$
10	$1^0 =$ _____	A. 360° B. $60''$ C. $60'$ D. $3600'$
11	Both the roots of the equation $(x-b)(x-c) + (x-c)(x-a) + (x-a)(x-b) = 0$ are always	A. Positive B. Negative C. Real D. None of these
12	Question Image	A. 2^{n-1} B. $1 - 2^{n-1}$ C. $n + 2^{n-1}$ D. $2^n - 1$
13	If $f(x) = x^2$ then $f(2)$ is	A. -2 B. 2 C. 4 D. -4
14	$\forall a, b, c \in \mathbb{R}, a + c = b + c \Rightarrow a = b$	A. Reflexive property B. Symmetric property C. Cancellations property w.r.t. addition D. Transitive property
15	Domain of $\sin \theta$ is	A. Set of real numbers B. Set of complex numbers C. Set of natural numbers D. Set of integers

16	Question Image	
17	Question Image	C. 2x D. 2
18	Question Image	A. Closure law of addition B. Associative law of addition C. Commutative law of multiplication D. Associative law of multiplication
19	1/3 is a decimal	A. Recurring B. Terminating C. Non-terminating D. None of the above
20	Question Image	