

ECAT Pre General Science Mathematics Online Test

Sr	Questions	Answers Choice
1	Question Image	A. $\sec 3x + c$ B. $-\operatorname{cosec} 3x + c$
2	If distance of (a,b) from origin is 5 then	A. $a^2 + b^2 = 5$ B. $a = 5$ C. $b = 5$
3	Which one is quadrantal angle	A. 8181710° B. 2345° C. -8181180° D. -2344°
4	Question Image	A. Commutative property of addition B. Closure property of addition C. Additive inverse D. Associative property w.r.t. to addition
5	graph of sine function is bounded between lines	A. $y \pm 1 = 0$ B. $x \pm 1 = 0$ C. $x \pm y = 0$ D. None of these
6	Every term of a G.P. is positive and also every term is the sum of two preceding terms. Then the common ratio of the G.P. is	
7	if $a_9 = 19, a_9 = 31$ are the 6th and 9th term of an A.P. and $d = 4$ is the common difference, then 18th term of the sequence is	A. 65 B. 67 C. 71 D. 75
8	Question Image	
9	An event having more than one sample point is called	A. Certain event B. Compound event C. Simple event D. None
10	Question Image	A. 0 B. 1
11	Roots of the equation $x^2 + 5x - 1 = 0$ are	A. Rational B. Irrational C. Complex D. None of these
12	The set $\{1, 2, 3, 4, \dots\}$ is called	A. Set of Natural numbers B. Set of whole numbers C. Set of rational number D. Set of irrational numbers
13	The vertex of the graph of the quadratic function $f(x) = -x^2 + 6x + 1$, is	A. $(-3, 10)$ B. $(-3, -10)$ C. $(3, 10)$ D. $(3, -10)$
14	$2x = 3$ is a conditional equation it is true for	A. 2 B. 3 C. $3/2$ D. $2/3$
15	Riaz, Saba, Maria, Shehzad are to give speeches in a class. The teacher can arrange the order of their presentation in	A. 4 ways B. 12 ways C. 256 ways D. 24 ways
16	Composition of functions is	A. Non-commutative ($fg \neq gf$) B. non-associative $[8(fh) \neq (8f)h]$ C. Commutative ($fg = gf$) D. $f \circ f \neq 1$
17	Question Image	A. 2C B. C^3 C. 1

D. 0

18 Range of $\sec x$ is _____

- A. $[-1, 1]$
- B. $\mathbb{R}$
- C. Negative real numbers
- D. $\mathbb{R} = \{x \mid -1 \leq x \leq 1\}$

19 Arithmetic mean between 14 and 18 is

- A. 16
- B. 17
- C. 15
- D. 32

20 Question Image