

ECAT (Pre-Eng) Mathematics Chapter 17 Functions and Limits

Sr	Questions	Answers Choice
1	Question Image	
2	The periods of the function $f(x) = x[x]$ is	A. 1 B. 2 C. Non periodic D. None of these
3	If $y=f(x)$ is a function then x is called	A. dependent variable B. independent variable C. constant D. none of these
4	The domain and range of a trigonometric function can be allocate by their	A. graph B. Continuity C. Discontinuity D. Periods
5	The range of $y=x^2 + 1$ is the set of non-negative real numbers except	A. $0 \leq y < 1$ B. $0 < y < 1$ C. $0 \leq y \leq 1$ D. $0 < y \leq 1$
6	The range of inequality $x + 2 > 4$ is	A. (-1, 2) B. (-2, 2) C. (1, ><math>\infty</math> D. None
7	$f(x) = ax + b$ will be an identity function if	A. $a = 1, b = 1$ B. $a = 1, b = 0$
8	In natural logarithm the base is	A. 1 B. 0 C. 10 D. e
9	$f(x) = x^3 - x/x^2 + 1$ is :	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
10	Question Image	A. 2 B. -1 C. 8 D. not defined
11	Question Image	
12	The domain of the function $x/x^2 - 4$ is given by	A. R B. $R + 2$ C. $[R - (<u>+</u>2)$ D. $R-4$
13	If $f(x) = x^3 - 2x^2 + 4x - 1$ then $f(2)$ is	A. 7 B. -16 C. 16 D. -9
14	Question Image	
15	If $f(x) = 2x+1$ then $f \circ f(x) =$ _____;	A. $4x+3$ B. $2x + 3$ C. $4x + 1$ D. None of these
16	Every relation, which can be represented by a linear equation in two variables, represents a	A. Relation B. Cartesian product C. Function D. Graph

17 If $f(x) = x^3 - 2x^2 + 4x - 1$, then $f(-2) = ?$

- A. 0
- B. -25
- C. 5
- D. 45

18 $f(x) = C$ is

- A. identity function
- B. constant function
- C. linear function
- D. quadratic function

19 Question Image

20 Question Image

- A. *π*
- B. *2π*
- C. *$\pi/2$*
- D. None of these