

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

Sr	Questions	Answers Choice
1	Question Image	A. $[0, 1[$ B. $[0, 1]$ C. $]0, 1[$ D. None of these
2	_____ invented a symbolic way to write the statement "y is a function of x" as $y = f(x)$	A. Leibniz B. Newton C. Euler D. None of these
3	Question Image	A. images B. pre-images C. constants D. none of these
4	Which is an explicit function	A. $y = x^2 + 2x - 1$ B. $x^2 + xy + y^2 = 2$ C. $x^2 + y^2 = xy + 2$ D. All are
5	Question Image	A. $\sinh x$ B. $\cosh x$ C. $\sec h x$ D. $\operatorname{cosec} h x$
6	Question Image	A. image B. pre-image C. constant D. none of these
7	Question Image	
8	$f(x) = ax + b$ will be an identity function if	A. $a = 1, b = 1$ B. $a = 1, b = 0$
9	Question Image	
10	The domain the function : $f(x) = x^2$ is given by	A. R B. Set of all non-negative Real numbers C. $R^{>-1}$ D. None of these
11	Question Image	A. 2 B. -1 C. 8 D. not defined
12	If $f(x) = x^2 - x$ then $f(0)$ is	A. 0 B. 1 C. 2 D. 3
13	If $f(x) = x + 1$ then $f(z^2 - 1)$ is	A. $z^2$ B. $z^2 + 2$ C. $z^2 - 2$ D. none of these
14	$f(x) = x^3 - x^2 + 1$ is :	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
15	Question Image	A. 0 B. 1 C. 2 D. $1/2$
16	If $f(x) = -x^2$ then $f(-2)$ is	A. -2 B. 2 C. -4 D. 4

17 Question Image

18 Question Image

19 If  $f(x) = (-x)^2$  then  $f(-2)$  is

A. 0  
B. 2  
C. -4  
D. 4

20 If  $y=f(x)$  is a function then  $x$  is called

A. dependent variable  
B. independent variable  
C. constant  
D. none of these