

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

Sr	Questions	Answers Choice
1	Question Image	
2	Question Image	
3	Question Image	A. 0 B. 1 C. 2
4	Question Image	A. 0 B. 1 D. none of these
5	Question Image	A. 3/4 B. r C. v D. None of these
6	The function $f(x) = x $ is a/an _____ function	A. Even B. Odd C. Both even as well as odd D. Neither even nor odd
7	If $f(x)$ is defined and continuous then $f(x)$ is always	A. Rational function B. Trigonometric function C. Logarithmic function D. All are correct
8	The range of function $f(x) = -x^2 + 2x - 1$ is	A. R B. $(-\infty, 0]$ C. $(-\infty, 1]$ D. $[0, \infty)$
9	Question Image	
10	Question Image	A. images B. pre-images C. constants D. none of these
11	A function from X to Y is written as	B. $f : X \text{ to } Y$ D. $f : Y \text{ to } Y$
12	Question Image	A. $\sin h x$ B. $\cos h x$ C. $\tan h x$ D. $\cot h x$
13	$f(x) = 3x/x^2 + 1$ is:	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
14	If $f(x) = 2x+1$ then $f \circ f(x) =$ _____;	A. $4x+3$ B. $2x+3$ C. $4x+1$ D. None of these
15	The behavior of trigonometric function is called	A. Continuity B. Discontinuity C. Periodicity D. Smoothness
16	A function in which the variable appears as exponent is called:	A. An identity function B. A logarithmic function C. an exponential function D. A rational function
17	If $f(x) = x^2 - x$ then $f(-2)$ is	A. 4 B. 6 C. 2 D. 0
18	Domain of $\cosh x$ is	A. R B. $R - \{0\}$ C. $(-\infty, \infty)$

C. $[1, \infty)$
D. $[0, \infty)$

19

Question Image

A. -1
B. 1
C. 2
D. -2

20

$\cos^2 x + \sin^2 x$

A. an even function
B. an odd function
C. an even and implicit function
D. neither even nor a odd