

ECAT Mathematics Chapter 17 Functions and Limits

Sr	Questions	Answers Choice
1	The domain of $f(x) = \log x$ is	<p>A. $[0, \infty)$</p> <p>B. $(0, \infty)$</p> <p>C. $[0, \infty)$</p> <p>D. $(-\infty, \infty)$</p>
2	Question Image	
3	A rule or correspondence that assigns to each element x in X a unique element y in Y is called a function from	<p>A. X to X</p> <p>B. X to Y</p> <p>C. Y to X</p> <p>D. none of these</p>
4	Which is not included in the domain of $\cos^{-1}x$	<p>A. 0</p> <p>B. 1</p> <p>C. -1</p> <p>D. 2</p>
5	If $f(x)$ is defined and continuous then $f(x)$ is always	<p>A. Rational function</p> <p>B. Trigonometric function</p> <p>C. Logarithmic function</p> <p>D. All are correct</p>
6	Question Image	<p>A. 2</p> <p>B. -1</p> <p>C. 8</p> <p>D. not defined</p>
7	Domain of $\cosh x$ is	<p>A. \mathbb{R}</p> <p>B. $\mathbb{R} - \{0\}$</p> <p>C. $[1, \infty)$</p> <p>D. $[0, \infty)$</p>
8	Question Image	<p>A. 0</p> <p>B. -4</p> <p>D. none of these</p>
9	If $f(x) = x^2 - x$ then $f(-2)$ is	<p>A. 4</p> <p>B. 6</p> <p>C. 2</p> <p>D. 0</p>
10	If $f(a) = b^2$ and $g(c) = d$ where $c = b^2$ then $(g \circ f)(a)$ is	<p>A. a</p> <p>B. c</p> <p>C. b</p> <p>D. d</p>
11	If x is an image of y under the function f . This can be written as	<p>A. $y = f(x)$</p> <p>B. $f(x) = 0$</p> <p>C. $x = f(y)$</p> <p>D. $f(y) = x$</p>

D. $\tau(y) = 0$

12 The periods of the function $f(x) = x[x]$ is

- A. 1
- B. 2
- C. Non periodic
- D. None of these

13 A function of the form $p(x)/Q(x)$ is called:

- A. Rational function
- B. Logarithmic function
- C. Exponential function
- D. Hyperbolic function

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

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

15 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

16 If $f(x) = x^2$ then $f(0)$ is

- A. 0
- B. 1
- C. 2
- D. none of these

17 

- A. 0
- B. 1
- C. 2

18 $\sin h x =$ _____

19 

- A. 1/8
- B. 1/2
- C. 1/4
- D. 1/6

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