

ECAT Mathematics Chapter 17 Functions and Limits

Sr	Questions	Answers Choice
1	If y is an image of x under the function f , then we write	A. $y = f(x)$ B. $x = f(y)$ C. $y = x$ D. none of these
2	A rule or correspondence that assigns to each element x in X a unique element y in Y is called a function from	A. X to X B. X to Y C. Y to X D. none of these
3	The range of inequality $x + 2 > 4$ is	A. $(-1, 2)$ B. $(-2, 2)$ C. $(1, \infty)$ D. None
4	Question Image	A. 0 B. 1 D. none of these
5	Question Image	A. 2 C. -2 D. none of these
6	$f(x) = \log x + 3$ is a	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
7	Question Image	A. $R/[0,4]$ B. $R/(0,4)$ C. $(0,4)$ D. $[0,4]$
8	$f(x) = x $ is a/an	A. Injective function B. Bijective function C. Surjective function D. Implicit function
9	Question Image	
10	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
11	The function $f : x \rightarrow y$ defined as $f(x) = \alpha \forall x \in X, \alpha \in y$ is called	A. Constant function B. Polynomial function C. Identity function D. Linear function
12	The range of function $f(x) = -x^2 + 2x - 1$ is	A. R B. $(-\infty, 0]$ C. $(-\infty, 1]$ D. $[0, \infty)$
13	If $y=f(x)$ is a function then y is called	A. dependent variable B. independent variable C. constant D. none of these
14	What is range of the function $g(x) = x-3 $?	A. $[0, \infty)$ B. $(0, \infty)$ C. $(-\infty, 3]$ D. $[0, \infty)$
15	$f(x) = 2x^2 + 3x + 5$ is a	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function

16 Question Image

17 If $f(x) = x^3$ then $f(-2)$ is

- A. -2
- B. -4
- C. -8
- D. 8

18 Question Image

19 Question Image

- A. $[0, 1[$
- B. $[0, 1]$
- C. $]0, 1[$
- D. None of these

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

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