

Mathematics ECAT Pre Engineering Chapter 17 Functions and Limits Online Test

Sr	Questions	Answers Choice
1	Question Image	A. 2 B. 6
2	Question Image	A. 2 C. -2 D. none of these
3	If $f(x) = x^2 - x$ then $f(-2)$ is	A. 4 B. 6 C. 2 D. 0
4	If $f(x) = x^2 - x$ then $f(2)$ is	A. 4 B. 6 C. 2 D. 0
5	If $f(x) = x^2 - x$ then $f(1)$ is	A. 0 B. 1 C. 2 D. 3
6	If $f(x) = x^2 - x$ then $f(0)$ is	A. 0 B. 1 C. 2 D. 3
7	If $f(x) = -x^3$ then $f(-2)$ is	A. -2 B. -4 C. -8 D. 8
8	If $f(x) = x^3$ then $f(-2)$ is	A. -2 B. -4 C. -8 D. 8
9	If $f(x) = -x^2$ then $f(-2)$ is	A. -2 B. 2 C. -4 D. 4
10	If $f(x) = (-x)^2$ then $f(-2)$ is	A. 0 B. 2 C. -4 D. 4
11	If $f(x) = x^2$ then $f(2)$ is	A. -2 B. 2 C. 4 D. -4
12	If $f(x) = x^2$ then $f(-2)$ is	A. -2 B. 2 C. 4 D. -4
13	If $f(x) = x^2$ then $f(0)$ is	A. 0 B. 1 C. 2 D. none of these
14	If $f(x) = x^2$ then $f(0)$ is	A. 0 B. 1 C. 2 D. none of these
15	Question Image	A. $f(x) = x^{\sup{2}}$ B. $f(x^{\sup{2}}) = x$ C. $f(x) = x$ D. none of these
16	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
17	Question Image	A. image B. pre-image C. constant D. none of these
18	Question Image	A. images B. pre-images C. constants D. none of these
19	Question Image	A. range of f B. domain of f C. both (a) and (b) D. none of these
20	Question Image	A. $x = f(y)$ B. $y = f(x)$ C. $x = f(x)$ D. $y = f(y)$
21	A function from X to X is denoted as	B. $f : X \text{ to } Y$ D. $f : Y \text{ to } Y$
22	A function from X to Y is written as	B. $f : X \text{ to } Y$ D. $f : Y \text{ to } Y$
23	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
24	A rule that assigns to each elements x in X a unique element y in Y is called a _____	A. domain B. range C. function D. none of these
25	The range of function $f(x) = -x^2 + 2x - 1$ is	A. R B. $(-\infty, 0]$ C. $(-\infty, 1]$ D. $[0, \infty)$
26	Inverse of the function $y = 10^x$ is	A. $y = \log x$ B. $y = \ln x$ C. $x = 10y$ D. $x = 10^y$
27	If $f(a) = b^2$ and $g(c) = d$ where $c = b^2$ then $(g \circ f)(a)$ is	A. a B. c C. b D. d
28	The set of points $\{(x, y) y = f(x), \forall x \in \}$ is called	A. Relation B. Graph of f C. Function D. All are correct
29	If $f(x) = 2x + 1$ then $f \circ f(x) =$ _____;	A. $4x + 3$ B. $2x + 3$ C. $4x + 1$ D. None of these
30	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