

## ECAT Mathematics Chapter 17 Functions and Limits

Sr	Questions	Answers Choice
1	$f(x) = ax + b$ will be a constant function if	A. $a = 1, b = 1$ B. $a = 1, b = 0$
2	The domain and range of a trigonometric function can be allocate by their	A. graph B. Continuity C. Discontinuity D. Periods
3	$f(x) = \sin x + \cos^2 x$ is	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
4	The range of inequality $x + 2 > 4$ is	A. (-1, 2) B. (-2, 2) C. (1, <span style='color: rgb(34, 34, 34); font-family: "Times New Roman"; font-size: 24px; text-align: center; background-color: rgb(255, 255, 248);'>∞</span> ) D. None
5	The range of function $f(x) = -x^2 + 2x - 1$ is	A. R B. $(-\infty, 0]$ C. $(-\infty, 1]$ D. $[0, \infty)$
6	$f(x) = x$ is	A. trigonometric function B. exponential function C. quadratic function D. identify function
7	$f(x) = x^3 - x/x^2 + 1$ is :	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
8	Question Image	A. quadratic function B. constant function C. linear function D. exponential function
9	Question Image	
10	Question Image	A. 0 B. 1 C. 1/2
11	Question Image	
12	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
13	$f(x) = 1$ is	A. identity function B. constant function C. linear function D. quadratic function
14	If $f(x) = x^3 - 2x^2 + 4x - 1$ then $f(2)$ is	A. 7 B. -16 C. 16 D. -9
15	Question Image	A. 2 D. 0
16	if the value of the sphere, $v = \frac{4}{3}\pi r^2$ , then the which of the following statement is true?	A. $r$ is the function of $v$ B. $v$ is the function of $r$ C. $\pi$ is independent variable D. None of these

17	Question Image	A. 0 B. 1 C. -1 D. none of these
18	The behavior of trigonometric function is called	A. Continuity B. Discontinuity C. Periodicity D. Smoothness
19	If $f(x) = -x^3$ then $f(-2)$ is	A. -2 B. -4 C. -8 D. 8
20	If $f(x) = x^2 - x$ then $f(0)$ is	A. 0 B. 1 C. 2 D. 3