

ECAT Mathematics Chapter 17 Functions and Limits

Sr	Questions	Answers Choice
1	Question Image	
2	$f(x) = \sin x + \cos^2 x$ is	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
3	The range of the function $f : x \rightarrow y$ is defined by	A. $\{x y = f(x) \forall x \in X \wedge y \in y\}$ B. $\{(x,y) y = f(x) \forall x \in X\}$ C. $\{y y = f(x) \forall x \in X \wedge y \in y\}$ D. Y
4	Question Image	A. 0 B. 3 C. 9 D. -3
5	$f(x) = 3x/x^2 + 1$ is:	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
6	The set of points $\{(x,y) y = f(x), \forall x \in X\}$ is called	A. Relation B. Graph of f C. Function D. All are correct
7	Question Image	A. (1,7/3) B. (1, 7/5) C. (1, 11/7) D. (1, 3/5)
8	Question Image	
9	Question Image	
10	Question Image	A. 0 B. -4 D. none of these
11	$f(x) = 2^x + 3 \cdot 2^{2x} + 5$ is	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
12	If a tangent line touches the function $y = f(x)$ in more than one point then $y = f(x)$ is	A. Periodic B. Surjective C. Bijjective D. Injective
13	Question Image	
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	Question Image	A. 2 B. -1 C. 8 D. not defined
16	The period $\sin^2 \theta$ is	A. π B. $\pi/2$ C. 2π D. $\pi/4$
17	Question Image	A. $\sinh x$ B. $\cosh x$ C. $\sec h x$ D. $\operatorname{cosec} h x$

18	Question Image	A. 2 B. 6
19	$f(x) = 1$ is	A. identity function B. constant function C. linear function D. quadratic function
20	The range of function $f(x) = -x^2 + 2x - 1$ is	A. \mathbb{R} B. $(-\infty, 0]$ C. $(-\infty, 1]$ D. $[0, \infty)$