

ECAT Mathematics Chapter 17 Functions and Limits

Sr	Questions	Answers Choice
1	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0 B. 1 D. none of these
2	$f(x) = 3x/x^2 + 1$ is:	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
3	$\tan^{-1} x =$ _____	
4	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
5	$x = \sec\theta, y = \tan\theta$ are the parametric equations of	A. Circle B. Hyperbola C. Ellipse D. parabola
6	In common logarithm the base is	A. 1 B. 0 C. 10 D. e
7	$f(x) = 2^x + 3 \cdot 2^{2x} + 5$ is	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
8	If $y=f(x)$ is a function then y is called	A. dependent variable B. independent variable C. constant D. none of these
9	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
10	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 2 B. -1 C. 8 D. not defined
11	$f(x) = x$ is	A. trigonometric function B. exponential function C. quadratic function D. identify function
12	Which of the following function form 1 to itself are bi-jective	A. $F(x) = x + 3$ B. $F(x) = x^{>5}$ C. $F(x) = 3x + 2$ D. $F(x) = x^{>2} + x$
13	The behavior of trigonometric function is called	A. Continuity B. Discontinuity C. Periodicity D. Smoothness
14	$\sin^{-1} x =$ _____	
15	Composition of functions is	A. Non-commutative ($fg \neq gf$) B. non-associative [$(fh) \neq (f)h$] C. Commutative ($fg = gf$) D. f of -1 \neq 1
16	If $f(a) = b$ and $g(b) = c$ where $c=b$ then $(g \circ f)(a)$ is	A. a B. c C. b D. d
17	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
18	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 2 B. 4

18		C. 8 D. 12
19	$f(x) = C$ is	A. identity function B. constant function C. linear function D. quadratic function
20		A. One-one but not onto B. One-one and onto C. Onto but not one-one D. Neither one-one nor onto