ECAT Mathematics Chapter 17 Functions and Limits

Sr	Questions	Answers Choice
1	Express the perimeter P of square as a function of its area A?	A. P = 4√A B. P =√A C. P = 2A D. P =π√A
2	If a variable y dependents on a variable x in such a way that each value of x determines exactly one value of y, then we say that	A. x is function of y B. y is a function of x C. y is independent variable D. x is real valued function
3	If f(x) = $-x^2$then f(-2) is	A. -2 B. 2 C. -4 D. 4
4	sin h x = _____	
5	$\pi$is the period of the function	A. |sin x| + |sin x| B. sin⁴x + cos x C. sin (sin x) + sin (cos x) D. None of these
6	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. Bijective D. Injective
7	If f(x) = x^2- x then f(-2) is	A. 4 B. 6 C. 2 D. 0
8	Question Image	
9	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
10	A function f is said to be an even if f(-x) =	A. 0 B. 1 C. f(x) D. -f(x)
11	Question Image	A. (1,7/3) B. (1, 7/5) C. (1, 11/7) D. (1, 3/5)
12	If f(x) = x^3- $2x^2$+ 4x -1, then f(-2) = ?	A. 0 B. -25 C. 5 D. 45
13	The only function which is both even and odd is	A. f(x) =α B. f(x) = x C. f(x) =0 D. Both A & B
14	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
15	f(x) = $x^3$is:	A. an odd function B. an even function C. an implicit function D. a quadratic funtion
16	The domain of the function x/x^2 -4 is given by	A. R B. R + 2 C. [R - (<u>+</u>2) D. R-4

17	Question Image	A. x = f(y) B. y = f(x) C. x = f(x) D. y = f(y)
18	If $f(x) = -x^3$ then f(-2) is	A. -2 B. -4 C. -8 D. 8
19	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
20	Question Image	A. 0 B. 1 C. 1/2