ECAT (Pre-Eng) Mathematics Chapter 17 Functions and Limits

Sr	Questions	Answers Choice
1	Question Image	
2	If $f(x) = (-x)^2$ then f(-2) is	A. 0 B. 2 C. -4 D. 4
3	A function from X to Y is written as	B. f : X to Y D. f : Y to Y
4	if the value of the sphere, $v = 4/3\pi r^2$, then the which of the following statement is true?	A. r is the function of v B. v is the function of π C. π is independent variable D. None of these
5	In natural logarithm the base is	A. 1 B. 0 C. 10 D. e
6	f(x) = sin x is:	A. an odd function B. an even function C. an implicit function D. an exponential function
7	The range of y=x2 + 1 is the set of non-negative real numbers except	A. 0≤ y < 1 B. 0 < y < 1 C. 0≤ y≤ 1 D. 0 < y≤1
8	Question Image	A. 0 B. 1 D. none of these
9	$f(x) = 2^x + 3 . 2^{2x} + 5$ is	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
10	Which of the following function form 1 to itself are bi-jective	A. F(x) = x + 3 B. F(x) = x⁵ C. F(x) = 3x + 2 D. F(x) = x²+ x
11	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
12	$\cos h^2 x + \sin h^2 x$	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
13	In common logarithm the base is	A. 1 B. 0 C. 10 D. e
14	sin h x = _____	
15	f(x) = 1 is	A. identity function B. constant function C. linear function D. quadratic function
16	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
17	f(x) = x3-x/x2+1 is :	A. an even function B. an odd function C. an even and implicit function

		D. neither even nor a odd
18	An even function is symmetric about the line	A. y = x B. x = 0 C. y = -x D. y = 0
19	A function f is said to be an even if f(-x) =	A. 0 B. 1 C. f(x) D. -f(x)
20	Inverse of the function y-10x is	A. y=logx B. y=lnx C. x=10y D. x=10y