ECAT Mathematics Chapter 17 Functions and Limits

Sr	Questions	Answers Choice
1	Question Image	A. 0 B. 1 C. -1 D. none of these
2	Question Image	A. -2 B. -1 C. 1 D. 2
3	Question Image	
4	A function F(x) is called even if	A. F(x) = F (-x) B. F(x) = F(-x) C. F(x) = -F(x) D. 2F(x) = 0
5	Question Image	
6	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
7	The range of function f(x)=-x2+2x-1 is	A. R B. (-∞,0] C. (-∞,1] D. [0,∞)
8	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
9	The domain of y =√(x^2-9) is	A. R B. (0 , +∞) C. (-∞ , -3)∪ (3 , +∞) D. (0 ,∞)
10	A function from X to Y is written as	B. f : X to Y D. f : Y to Y
11	Question Image	A. sin h x B. cos h x C. tan h x D. cot h x
12	Graph of the question $x^2+ y^2= 4$ is	A. A circle B. An ellipse C. A parabola D. A square
13	The largest possible domain of the function: y=√(x) is:	A. (0 ,∞) B. 12 C. (3 , 12) D. (3 ,∞)
14	If x is an image of y under the function f. This can be written as	A. y = f(x) B. f(x) = 0 C. x = f(y) D. f(y) =0
15	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
16	Question Image	A. R/[0,4] B. R/(0,4) C. (0,4) D. [0,4]
		A. (-1, 2) B. (-2, 2) C. (1 <span style="color: rgb(34, 34

17	The range of inequality x + 2 > 4 is	C. (-∞, ∞) D. None
18	f(x) = ax + b will be an identity function if	A. a = 1 , b = 1 B. a = 1 , b = 0
19	If $f(x) = x^2$ then f(0) is	A. 0 B. 1 C. 2 D. none of these
20	The function discontinuous at x = 0 is (1) tan x (II) cot x (III) sec x (iv)cosec x)	A. I & III B. I & IV C. II & IV D. II & III