


ECAT Mathematics Chapter 17 Functions and Limits

Sr	Questions	Answers Choice
1	Which is an explicit function	<p>A. $y = x^2 + 2x - 1$</p> <p>B. $x^2 + xy + y^2 = 2$</p> <p>C. $x^2 + y^2 = xy + 2$</p> <p>D. All are</p>
2	If $y=f(x)$ is a function then y is called	<p>A. dependent variable</p> <p>B. independent variable</p> <p>C. constant</p> <p>D. none of these</p>
3	if the value of the sphere, $v = \frac{4}{3}\pi r^2$, then the which of the following statement is true?	<p>A. r is the function of v</p> <p>B. v is the function of r</p> <p>C. π is independent variable</p> <p>D. None of these</p>
4	Question Image	<p>A. One-to-one and onto</p> <p>B. One-to-one but not on to</p> <p>C. Onto but not one-to-one</p> <p>D. Neither one-to-one nor onto</p>
5	Question Image	<p>A. 0</p> <p>B. 1</p> <p>C. 2</p>
6	$p(x) = 2x^4 - 3x^3 + 2x - 1$ is polynomial of degree	<p>A. 1</p> <p>B. 2</p> <p>C. 3</p> <p>D. 4</p>
7	If y is an image of x under the function f, then we write	<p>A. $y = f(x)$</p> <p>B. $x = f(y)$</p> <p>C. $y = x$</p> <p>D. none of these</p>
8	Question Image	<p>A. $f(x) = x^2$</p> <p>B. $f(x^2) = x$</p> <p>C. $f(x) = x$</p> <p>D. none of these</p>
9	Question Image	
10	Question Image	<p>A. One-one but not onto</p> <p>B. One-one and onto</p> <p>C. Onto but not one-one</p> <p>D. Neither one-one nor onto</p>
11	Question Image	<p>A. 0</p> <p>B. -2</p> <p>C. 1</p> <p>D. 4</p>
12	The domain of $y = \cos^{-1} x$ is	<p>A. $-\infty < x < \infty$</p> <p>B. $-1 \leq x \leq 1$</p> <p>C. $x \leq -1$ or $x \geq 1$</p> <p>D. None of these</p>
13	Every relation, which can be represented by a linear equation in two variables, represents a	<p>A. Relation</p> <p>B. Cartesian product</p> <p>C. Function</p> <p>D. Graph</p>
14	If $f(x) = x^2$ then $f(2)$ is	<p>A. -2</p> <p>B. 2</p> <p>C. 4</p> <p>D. -4</p>
15	Question Image	
16	Which is not included in the domain of $\cos^{-1} x$	<p>A. 0</p> <p>B. 1</p> <p>C. -1</p> <p>D. 2</p>

17	In common logarithm the base is	A. 1 B. 0 C. 10 D. e
18	If $f(x) = x^3$ then $f(-2)$ is	A. -2 B. -4 C. -8 D. 8
19	Question Image 	A. 0 B. 1 D. -1
20	An even function is symmetric about the line	A. $y = x$ B. $x = 0$ C. $y = -x$ D. $y = 0$