

ECAT Mathematics Chapter 17 Functions and Limits

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

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

20 An even function is symmetric about the line
A. $y = x$
B. $x = 0$
C. $y = -x$
D. $y = 0$
