

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

Sr	Questions	Answers Choice
1	<input type="text" value="Question Image"/>	
2	<input type="text" value="Question Image"/>	A. 2 B. 6
3	<input type="text" value="Question Image"/>	
4	_____ invented a symbolic way to write the statement "y is a function of x" as $y = f(x)$	A. Leibniz B. Newton C. Euler D. None of these
5	In common logarithm the base is	A. 1 B. 0 C. 10 D. e
6	Which is not included in the domain of $\cos^{-1}x$	A. 0 B. 1 C. -1 D. 2
7	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 r C. $\pi$ is independent variable D. None of these
8	$f(x) = C$ is	A. identity function B. constant function C. linear function D. quadratic function
9	$f(x) = x^3 - x^2 + 1$ is :	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
10	The domain of the function $\sqrt{x^2 - 4}$ is given by	A. R B. $R + 2$ C. $[R - (\sqrt{4}, \sqrt{4})]$ D. $R - 4$
11	The domain of $y = \sqrt{x^2 - 9}$ is	A. R B. $(0, +\infty)$ C. $(-\infty, -3) \cup (3, +\infty)$ D. $(0, \infty)$
12	<input type="text" value="Question Image"/>	A. sin h x B. cos h x C. tan h x D. cot h x
13	<input type="text" value="Question Image"/>	
14	Domain of $y = \sec x$ is	A. All real numbers except $\pi/2 + n\pi$ B. R C. All negative integers D. None of these
15	$f(x) = 2^x + 3 \cdot 2^{2x} + 5$ is	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
16	<input type="text" value="Question Image"/>	
17	$\pi/4$ is the period of the function	A. $ \sin x  +  \sin x $ B. $\sin^4 x + \cos x$ C. $\sin(\sin x) + \sin(\cos x)$ D. None of these
18	<input type="text" value="Question Image"/>	A. sin h x B. cos h x C. sec h x

D. cosec h x

19

Question Image

A.  $f(x) = x^2$

B.  $f(x^2) = x$

C.  $f(x) = x$

D. none of these

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In the function  $f: A \rightarrow B$ , the elements of a are called

A. Images

B. Pre-images

C. ranges

D. Parameters