

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

Sr	Questions	Answers Choice
1	Question Image	
2	If $f(x) = 2x+1$ then $f \circ f(x) =$ _____;	<p>A. $4x+3$ B. $2x+3$ C. $4x+1$ D. None of these</p>
3	Question Image	<p>A. π B. 2π C. $\pi/2$ D. None of these</p>
4	If $f(x) = x^2 - x$ then $f(-2)$ is	<p>A. 4 B. 6 C. 2 D. 0</p>
5	A function from X to X is denoted as	<p>B. $f: X \text{ to } Y$ D. $f: Y \text{ to } Y$</p>
6	Point (2,0) lies on trigonometric function $f(x) =$ _____;	<p>A. $\sin x$ B. $\cos x$ C. $\tan x$ D. $\sec x$</p>
7	Question Image	<p>A. $\sinh x$ B. $\cosh x$ C. $\tanh x$ D. $\coth x$</p>
8	If a variable y depends on a variable x in such a way that each value of x determines exactly one value of y, then we say that	<p>A. x is function of y B. y is a function of x C. y is independent variable D. x is real valued function</p>
9	Question Image	
10	Question Image	
11	Question Image	<p>A. 0 B. 1 C. 8 D. ∞</p>
12	$p(x) = 2x^4 - 3x^3 + 2x - 1$ is polynomial of degree	<p>A. 1 B. 2 C. 3 D. 4</p>
13	If the domain of the function $f: x \mapsto 2x^3 + 1$ is $\{-1, 2, 3\}$, the range of the function is	<p>A. $\{3, 2, 5\}$ B. $\{1, 3, 9\}$ C. $\{-1, -2, -3\}$ D. $\{3, 9, 19\}$</p>
14	Question Image	<p>A. 0 B. 1 C. 2</p>
15	$xy = 2$ is:	<p>A. a constant function B. an identity function C. an improper function D. implicit function</p>

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Question Image

- A. 0
 - B. 1
 - D. -1
-

17

$f(x) = x^3$ is:

- A. an odd function
 - B. an even function
 - C. an implicit function
 - D. a quadratic function
-

18

If the function $y=2x-3$, what is the preimage of 11?

- A. 11
 - B. 7
 - C. 5
 - D. 2
-

19

Question Image

- A. 2
 - D. 0
-

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In natural logarithm the base is

- A. 1
 - B. 0
 - C. 10
 - D. e
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