

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

Sr	Questions	Answers Choice
1	If $f(x) = x^2$ then $f(2)$ is	A. -2 B. 2 C. 4 D. -4
2	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 2 B. 4 C. 8 D. 12
3	Every relation, which can be represented by a linear equation in two variables, represents a	A. Relation B. Cartesian product C. Function D. Graph
4	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0 B. 1 C. 8 D. <span style="color: green; font-size: 1.2em;">&lt;span style="color: rgb(34, 34, 34); font-family: "Times New Roman"; font-size: 24px; text-align: center; background-color: rgb(255, 255, 224);"&gt;&lt;i&gt;&lt;/i&gt;&lt;/span&gt;</span>
5	The domain of $y = \sqrt{(x^2-9)}$ is	A. R B. $(0, +\infty)$ C. $(-\infty, -3) \cup (3, +\infty)$ D. $(0, \infty)$
6	Express the perimeter P of square as a function of its area A?	A. $P = 4\sqrt{A}$ B. $P = \sqrt{A}$ C. $P = 2A$ D. $P = \pi\sqrt{A}$
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $\sin h x$ B. $\cos h x$ C. $\tan h x$ D. $\cot h x$
8	The domain of $y = \cos^{-1} x$ is	A. $-\infty \leq x \leq \infty$ B. $-1 \leq x \leq 1$ C. $x \leq -1$ or $x \geq 1$ D. None of these
9	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
10	$p(x) = 2x^4 - 3x^3 + 2x - 1$ is polynomial of degree	A. 1 B. 2 C. 3 D. 4
11	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
12	$f(x) = \sin x$ is:	A. an odd function B. an even function C. an implicit function D. an exponential function
13	If $f(x) = x^2 - x$ then $f(2)$ is	A. 4 B. 6 C. 2 D. 0
14	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
15	Which is an explicit function	A. $y = x^2 + 2x - 1$ B. $x^2 + xy + y^2 = 2$ C. $x^2 + y^2 = xy + 2$ D. All are
		A. 0 B. 1

16 If  $f(x) = x^2 - x$  then  $f(0)$  is

- B. 1
- C. 2
- D. 3

17  $f(x) = 3x^4 - 2x^2 + 7$  is:

- A. an even function
- B. an odd function
- C. an even and implicit function
- D. neither even nor a odd

18 Question Image

19 Question Image

- A.  $\mathbb{R}/[0,4]$
- B.  $\mathbb{R}/(0,4)$
- C.  $(0,4)$
- D.  $[0,4]$

20 Question Image

- A.  $\sinh x$
- B.  $\cosh x$
- C.  $\sec h x$
- D.  $\operatorname{cosec} h x$