

ECAT Pre General Science Mathematics Chapter 17 Functions and Limits Online Test

Sr	Questions	Answers Choice
1	Question Image	A. 1/8 B. 1/2 C. 1/4 D. 1/6
2	Question Image	A. (1,7/3) B. (1, 7/5) C. (1, 11/7) D. (1, 3/5)
3	Question Image	A. R/[0,4] B. R/(0,4) C. (0,4) D. [0,4]
4	Question Image	A. Does not exist because f is unbounded B. Is not attained even though f is bounded C. Is equal to 1 D. Is equal to -1
5	Question Image	A. 3/4 B. r C. v D. None of these
6	Question Image	A. 0 B. 1 C. 8 D. <i></i>
7	The area of circle of unit radius =	A. 0 B. 1 C. 4 D. π
8	Domain of $y = \operatorname{scs} x$ is	A. All real numbers except $\pi/2 + n\pi$ B. R C. All negative integers D. None of these
9	Graph of the question $x^2 + y^2 = 4$ is	A. A circle B. An ellipse C. A parabola D. A square
10	Question Image	A. 1 B. 0 C. -2 D. 3
11	The range of inequality $x + 2 > 4$ is	A. (-1, 2) B. (-2, 2) C. (1, <i></i>) D. None
12	A function F(x) is called even if	A. $F(x) = F(-x)$ B. $F(x) = F(-x)$ C. $F(x) = -F(x)$ D. $2F(x) = 0$

- 13 The domain of $f(x) = \log x$ is
- A. $[0, \infty)$
B. $(0, \infty)$
C. $[0, \infty)$
D. $(-\infty, \infty)$
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- 14 Question Image
-
- 15 Which is an explicit function
- A. $y = x^2 + 2x - 1$
B. $x^2 + xy + y^2 = 2$
C. $x^2 + y^2 = 2$
D. All are
-
- 16 Which is not included in the domain of $\cos^{-1}x$
- A. 0
B. 1
C. -1
D. 2
-
- 17 $p(x) = 2x^4 - 3x^3 + 2x - 1$ is polynomial of degree
- A. 1
B. 2
C. 3
D. 4
-
- 18 Question Image
-
- 19 If $f(x) = x^3 - 2x^2 + 4x - 1$, then $f(-2) = ?$
- A. 0
B. -25
C. 5
D. 45
-
- 20 Question Image
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- 21 Question Image
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- 22 Question Image
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- 23 Which of the following function form 1 to itself are bijective
- A. $F(x) = x + 3$
B. $F(x) = x^5$
C. $F(x) = 3x + 2$
D. $F(x) = x^2 + x$
-
- 24 π is the period of the function
- A. $|\sin x| + |\cos x|$
B. $\sin 4x + \cos x$
C. $\sin(\sin x) + \sin(\cos x)$
D. None of these
-
- 25 The periods of the function $f(x) = x[x]$ is
- A. 1
B. 2
C. Non periodic
D. None of these
-

- 26 The period of the function $f(x) = \sin^4x + \cos^4x$ is

A. π
B. $\frac{\pi}{2}$
C. 2
D. None of these

- 27 The period $\sin^2\theta$ is

A. π^2
B. π
C. 2 π
D. $\pi/2$

- 28 Question Image

A. π
B. 2π
C. $\pi/2$
D. None of these

- 29 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

- 30 Question Image

A. 2
B. 4
C. 8
D. 12