

ECAT Pre Engineering Entry Test

Sr	Questions	Answers Choice
1	Question Image	A. 0 B. U C. $u/2$ D. $\log u$
2	Question Image	
3	Question Image	
4	Question Image	
5	Question Image	
6	Question Image	
7	Question Image	
8	Question Image	A. 1 B. $1/2$ C. 0 D. None
9	Question Image	A. y/x B. x/y C. y/z D. None
10	Question Image	
11	Question Image	A. xy B. y C. 0 D. x
12	Question Image	A. 1 B. -1 C. $-1/2$ D. $1/2$
13	Question Image	A. 2 B. 1 C. 5 D. 0
14	Question Image	A. $1/8$ B. $1/2$ C. $1/4$ D. $1/6$
15	Question Image	A. $(1, 7/3)$ B. $(1, 7/5)$ C. $(1, 11/7)$ D. $(1, 3/5)$
16	Question Image	A. $R/[0,4]$ B. $R/(0,4)$ C. $(0,4)$ D. $[0,4]$
17	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
18	Question Image	A. $3/4$ B. r C. v D. None of these
		A. 0 B. 1 C. 8

19

Question Image

D. <i>∞</i>

20

The area of circle of unit radius =

A. 0
B. 1
C. 4

D. π

21

Domain of $y = \text{scs } x$ is

A. All real numbers except $\pi/2 + n\pi$
B. R
C. All negative integers
D. None of these

22

Graph of the question $x^2 + y^2 = 4$ is

A. A circle
B. An ellipse
C. A parabola
D. A square

23

Question Image

A. 1
B. 0
C. -2
D. 3

24

The range of inequality $x + 2 > 4$ is

A. (-1, 2)
B. (-2, 2)
C. (1, ∞)
D. None

25

A function $F(x)$ is called even if

A. $F(x) = F(-x)$
B. $F(x) = F(-x)$
C. $F(x) = -F(x)$
D. $2F(x) = 0$

26

The domain of $f(x) = \log x$ is

A. $[0, ∞)$
B. $(0, ∞)$
C. $[0, ∞)$
D. $[∞, ∞)$

27

Question Image

A. $y = x^2 + 2x - 1$
B. $x^2 + xy + y^2 = 2$
C. $x^2 + y^2 = 2$
D. All are

28

Which is an explicit function

A. 0
B. 1
C. -1

29

Which is not included in the domain of $\cos^{-1}x$

30 $p(x) = 2x^4 - 3x^3 + 2x - 1$ is polynomial of degree

A. 1

B. 2

C. 3

D. 4