

## ECAT Pre Engineering Entry Test

Sr	Questions	Answers Choice
1	Question Image	A. $3 \sec^2 x$ B. $3 \sec^2 x \tan^3 x$ C. $\sec^2 x \tan^3 x$ D. $\sec^2 x$
2	Question Image	A. $\cos 2x$ B. $2 \cos 2x$ C. $2 \sin 2x$ D. $-2 \cos 2x$
3	Question Image	D. none of these
4	Question Image	D. none of these
5	Question Image	D. none of these
6	Question Image	
7	Question Image	
8	Question Image	A. 100 B. 99 C. 0 D. none of these
9	Question Image	A. $x^3$ B. $3x^2$ C. $3x$ D. 3
10	Question Image	A. 0 B. -1 C. 1 D. not defined
11	Question Image	A. 0 B. -1 C. 1 D. not defined
12	Question Image	
13	Question Image	
14	Question Image	A. 0 B. -1 C. 1 D. -2
15	Question Image	A. 0 B. -1 C. 1 D. 2
16	Question Image	A. 0 B. -1 C. 1
17	Question Image	
18	Question Image	A. 0 B. -1 C. 1 D. $1/2$
19	Question Image	A. $\cos x$ B. $\sec x \tan x$ C. $\sec^2 x$ D. $-\operatorname{cosec}^2 x$
20	Question Image	A. $\sec x \tan x$ B. $-\operatorname{cosec} x \cot x$ C. $\sec^2 x$ D. $\sec^2 x$

D.  $-\sin x$

21

Question Image

- A.  $-\operatorname{cosec}^2 x$   
B.  $-\sec^2 x$   
C.  $-\operatorname{cosec} x \cot x$   
D.  $\operatorname{cosec} x$

22

Question Image

- A.  $\sec x \tan x$   
B.  $\cos^2 x$   
C.  $\sin^2 x$   
D.  $\sec^2 x$

23

Question Image

24

Question Image

- A.  $-\cos x$   
B.  $\sin x$   
C.  $-\sin x$   
D.  $\sec x$

25

Question Image

- A.  $\cos x$   
B.  $-\sin x$   
C.  $-\cos x$   
D.  $\tan x$

26

Question Image

27

Question Image

- A.  $100x^{99}$   
B.  $100x^{101}$   
C.  $-99x^{99}$   
D.  $-100x^{101}$

28

Question Image

D. none of these

29

Question Image

30

Question Image

- A.  $x^{39}$   
B.  $40x^{39}$   
C.  $40x^{41}$   
D. none of these