

## ECAT Mathematics Online Test

Sr	Questions	Answers Choice
1	Question Image	
2	Question Image	
3	$(n + 2) (n + 1) n =$ _____	
4	$9 \cdot 8 \cdot 7 \cdot 6 =$ _____	
5	Question Image	B. $\ln(x^{<sup>2</sup>- x + 1) <sup>4</sup>+ c$
6	Question Image	B. $\ln(x^{<sup>2</sup>- x + 1) + c$ D. $\ln(2x - 1) + c$
7	If n is a negative integer n! is	A. 1 B. 0 C. Unique D. Not defined
8	Question Image	A. $(x^{<sup>3</sup>- 3x^{<sup>2</sup>}) <sup>8</sup>+ c$ D. $3x^{<sup>2</sup>- 6x + c$
9	Question Image	A. 0 B. -1 C. 1 D. 2
10	Question Image	A. $4(x^{<sup>3</sup>- 3x^{<sup>2</sup>}) <sup>3</sup>+ c$ B. $3x^{<sup>2</sup>- 6x + c$
11	The probability that a person A will be alive 15 years hence is 5/7 and the probability that another person B will be alive 15 years hence is 7/9. Find the probability that both will be alive 15 years hence	A. 4/63 B. 5/9 C. 45/49 D. None of these
12	Question Image	C. $x^{<sup>2</sup>+ 2x + c$ D. $(x^{<sup>2</sup>+ 2x - 1) <sup>4</sup>+ c$
13	The sample space for tossing a coin twice is	A. {H, T} B. {HH, HT, TH, TT} C. {H, T, HH} D. {HH, HT, TT}
14	Question Image	C. $\ln f(x) + c$ D. $f(x) - c$
15	Question Image	A. $P(A) + P(B)$ B. $P(A) - P(B)$ C. $P(A) \cdot P(B)$ D. $P(A) / P(B)$
16	The probability that a slip of number divisible by 4 is picked from the slips bearing numbers 1, 2, 3, ...10 is	A. 1/5 B. 1/4 C. 1/3 D. 1/2
17	A dice is rolled. The probability that the dots on the top are greater than 4 is	A. 1/6 B. 1/3 C. 1/2 D. 1
18	The probability to get an odd number in a dice thrown once is	A. 6 B. 1 C. 1/6 D. 1/2
19	The sample space for tossing a coin once is	A. {T, T} B. {H, H} C. {H, T} D. None of these

20	Question Image	
21	Question Image	A. $\sec 3x + c$ B. $-\operatorname{cosec} 3x + c$
22	Question Image	A. 5 B. 20 C. 9 D. 4
23	Question Image	B. $\tan 3x + c$ C. $\cot 3x + c$ D. $-\cot 3x + c$
24	Question Image	A. 110 B. 220 C. 1320 D. None of these
25	Question Image	A. $-\cot 4x + c$ B. $\cot 4x + c$ C. $\tan 4x + c$ D. $-\tan 4x + c$
26	Question Image	
27	Question Image	A. $\cos 2x + c$ B. $-\cos 2x + c$ C. $\tan 2x + c$ D. $\cot 2x + c$
28	Question Image	A. $x^3 - x^2 + x + c$ B. $6x - 2 + c$ C. $x^3 - 2x + c$
29	The number of the diagonals of a 6 sided figure is	A. 15 B. 21 C. 9 D. 6
30	Question Image	A. $2x - 3x + c$ C. $x^2 - 3x + c$