

ECAT Computer Science Entry Test

Sr	Questions	Answers Choice
1	Question Image	A. $a \cot(ax + b) + c$ B. $-a \cot(ax + b) + c$
2	Question Image	A. $a \tan(ax + b) + c$ B. $-a \tan(ax + b) + c$
3	Question Image	A. $n!$ B. $0!$ C. 1 D. None of these
4	Question Image	A. $a \sin(ax + b) + c$ B. $-a \sin(ax + b) + c$
5	Question Image	A. $a \cos(ax + b) + c$ B. $-a \cos(ax + b) + c$
6	Question Image	
7	Question Image	
8	Question Image	
9	Question Image	A. 3 B. 6 C. 0 D. None of these
10	$(n + 2)(n + 1)n$ in factorial form is	
11	$n(n - 1)(n - 2)$ in factorial form is	
12	Question Image	A. 56 B. 7 C. 8 D. $8/7$
13	Question Image	
14	Question Image	A. $5x^4 + c$ B. $\frac{1}{6}x^6 + c$ C. $5x^2 + c$ D. $\frac{1}{5}x^6 + c$
15	$6! =$ _____	A. 360 B. 720 C. $6.5.4$ D. None of these
16	Question Image	
17	$8 \cdot 7 \cdot 6 \cdot 5$ in factorial form is	
18	Question Image	A. 8 B. $1/56$ C. 56 D. None of these
19	$0! =$ _____	A. 0 B. 1 C. 2 D. Not defined
20	For a positive integer n	A. $n! = n(n + 1)$ B. $n! = n(n+1)!$ C. $n! = n(n - 1)$ D. $n! = n(n - 1)!$
21	If n is a positive integer then $n!$ is	A. $(n - 1)(n - 2) \dots 3, 2, 1$ B. $n(n - 1)(n - 2) \dots 3, 2, 1$ C. $n(n - 1)(n - 2) \dots 3$ D. None of these

22	$1 + 2 + 3 + \dots + n = \underline{\hspace{2cm}}$	
23	The third term of the sequence $a_n = (-1)^{n-1}(n-7)$ is _____	A. 8 B. 4 C. -4 D. 8
24	The fifth term of the sequence $a_n = 2n + 3$ is _____	A. 13 B. -13 C. 8 D. 3
25	If $a_1 = 3$, $r = 2$, then the n th term of the G.P. is	A. $2 \cdot 3^{n-1}$ B. $3 \cdot 2^{n-1}$ C. $3 \cdot 2^{n+1}$ D. $3 \cdot 2^{n-1}$
26	If a_1 , r and a_n are the first term, common ratio and the n th term respectively of a G. P. then $a_n =$	A. $a \cdot r^{n-1}$ B. $a \cdot r^{n-1}$ C. $a \cdot r^{n+1}$ D. $a \cdot r$
27		A. 2 B. -3/2 C. 1 D. 0
28		A. 1, 1/2, 0 B. 1, 2, 1 C. 1, 2, 3 D. 1, 2, 0
29	The 6th term of an arithmetic sequence whose first term is 3 and common difference is zero is	A. 18 B. 6 C. 3 D. 0
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