Mathematics ECAT Pre Engineering Online Test

Sr	Questions	Answers Choice
1	Question Image	A. a sec(ax + b) + c B. - a sec(ax + b) + c
2	Question Image	A. a cot(ax + b) + c B. - a cot(ax + b) + c
3	Question Image	A. a tan(ax + b) + c B. - a tan(ax + b) + c
4	Question Image	A. n! B. 0! C. 1 D. None of these
5	Question Image	A. a sin(ax + b) + c B. - a sin(ax + b) + c
6	Question Image	A. a cos(ax + b) + c B. - a cos(ax + b) + c
7	Question Image	
8	Question Image	
9	Question Image	
10	Question Image	A. 3 B. 6 C. 0 D. None of these
11	(n + 2) (n + 1)n in factorial form is	
12	n(n - 1) (n - 2) in factorial form is	
13	Question Image	A. 56 B. 7 C. 8 D. 8/7
14	Question Image	
15	Question Image	A. 5x^{4 + c} B. 1/6 x⁶+ c C. 5x²+ c D. 1/5 x⁶+ c
16	6! = _____	A. 360 B. 720 C. 6.5.4 D. None of these
17	Question Image	
18	8 . 7 . 6. 5 in factorial form is	
19	Question Image	A. 8 B. 1/56 C. 56 D. None of these
20	0! = _____	A. 0 B. 1 C. 2 D. Not defined
21	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)!
22	If n is a positive integer then n! is	A. (n - 1) (n - 2) .....3,.2.1 B. n(n - 1) (n - 2) ...3.2.1 C. n(n - 1) (n -2) ... 3

		C. n(n − 1) (n − 2) ... 3 D. None of these
23	1 + 2 + 3 + ... + n = _____	
24	The third term of the sequence $a_n = (-1)^{n-1}(n-7)$ is _____	A. 8 B. 4 C. -4 D. 8
25	The fifth term of the sequence $a_n = 2n + 3$ is _____	A. 13 B. -13 C. 8 D. 3
26	If $a_1 = 3$, r = 2, then the nth term of the G.P. is	A. 2.3ⁿ⁻¹ B. 3.2ⁿ C. 3.2ⁿ⁺¹ D. 3.2ⁿ⁻¹
27	If a_1, r and a_n are the first term, common ratio and the nth term respectively of a G. P. then a_n=	A. a₁rⁿ B. a₁rⁿ⁻¹ C. a₁rⁿ⁺¹ D. a₁r
28	Question Image	A. 2 B. -3/2 C. 1 D. 0
29	Question Image	A. 1, 1/2, 0 B. 1, 2, 1 C. 1, 2, 3 D. 1, 2, 0
30	The 6th term of an arithmetic sequence whose first term is 3 and common difference in zero is	A. 18 B. 6 C. 3 D. 0