

## ECAT (Pre-Eng) Mathematics Chapter 8 Sequences and Series

Sr	Questions	Answers Choice
1	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 1, 1/2, 0 B. 1, 2, 1 C. 1, 2, 3 D. 1, 2, 0
2	99th term of the series $2 + 7 + 14 + 23 + 34 + \dots$ is	A. 9998 B. 9999 C. 10000 D. None of these
3	The 7th term of the A.P 7,11,15,is	A. 24 B. 31 C. 26 D. 23
4	A,G,H are in	A. A.P B. G.P C. H.P D. None of these
5	An infinite arithmetic series is always	A. Convergent B. Oscillatory C. Divergent D. None of these
6	5th term of a G.P. is 2, then the product of first 9 terms is	A. 256 B. 128 C. 512 D. None of these
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
8	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
9	If $T_n = (n-5)^2 + 5$ , then find $T_3 \times T_4$ .	A. 54 B. 12 C. 4 D. 9
10	The sides of a right angled triangle are in A.P The ratio of sides is	A. 1:2:3 B. 3:4:5 C. 2:3:4 D. 5:8:3
11	The 10th common term between the series $3+7+11+\dots$ and $1 + 6 + 11 + \dots$ is	A. 191 B. 193 C. 211 D. None of these
12	Sequence also called.....	A. Series B. Function C. progressions D. Elements
13	If $a_1 = 3$ , $r = 2$ , then the nth 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. $3 \cdot 2^{n-1}$
14	An infinite sequence has no	A. nth term B. Last term C. Sum D. None of these
15	A number H is said to be the H.M. between a and b if a, H, b are in	A. A.P. B. G. P. C. H. P. D. None of these
16	if $a_9 = 19, a_9 = 31$ are the 6th and 9th term of an A.P. and $d=4$ is the common difference, then 18th term of the sequence is	A. 65 B. 67 C. 71 D. 75

17	Question Image <input type="text"/>	A. $2^{2-n} - 1$ B. $1 - 2^{-n}$ C. $n + 2^{-n} - 1$ D. $2^n - 1$
18	Let the sequence 1, 2, 2, 4, 4, 4, 4, 8, 8, 8, 8, 8, 8, 8, ..... where n consecutive terms have the value n, then 1025th term is	A. $2^9$ B. $2^{10}$ C. $2^{11}$ D. $2^8$
19	If a, b, c are in A.P., then $3^a, 3^b, 3^c$ are in	A. A.P. B. G.P. C. H.P. D. None of these
20	A sequence whose reciprocal is an A.P is called	A. Oscillator B. H.P C. G.P D. None of these