

## ECAT Mathematics Chapter 8 Sequences and Series

Sr	Questions	Answers Choice
1	Let $S_n$ denote the sum of the first $n$ terms of an A.P. If $S_{2n} = 3 S_n$ ; $S_n$ is equal to	A. 4 B. 6 C. 8 D. 10
2	The sum of all 2 digit number is	A. 4750 B. 3776 C. 4895 D. 4905
3	If the domain of sequence is finite set then the sequence is called	A. geometric sequence B. infinite sequence C. finite sequence D. arithmetic sequence
4	The fifth term of the sequence $a_n = 2n + 3$ is _____	A. 13 B. -13 C. 8 D. 3
5	A number $A$ is called the arithmetic mean between $a$ and $b$ if $a, A, b$ is _____	A. Arithmetic sequence B. Geometric sequence C. Harmonic sequence D. Arithmetic sequence
6	The sum of an indicated number of terms in a sequence is called	A. sequence B. progression C. Series D. Mean
7	The seventh term of an A.P whose first term is $P$ and common difference is $q$ . is	A. $P-6q$ B. $P+6q$ C. $P-4q$ D. $P-nq$
8	The 7th term of the A.P 7,11,15, is	A. 24 B. 31 C. 26 D. 23
9	If $A, G, H$ are the arithmetic, geometric and harmonic means between $a$ and $b$ respectively then $A, G, H$ are in	A. A. P. B. G. P. C. H. P. D. None of these
10	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
11	A sequence whose reciprocal is an A.P is called	A. Oscillator B. H.P C. G.P D. None of these
12	If $S_n$ is a definite number as $n \rightarrow \infty$ , then the geometric series is	A. Convergent B. Divergent C. Oscillatroy D. None of these
13	Find the sum of the infinite geometric series $2 + 1 + 0.5 + \dots$	A. 3.5 B. 3 C. 4 D. None of these
14	Which term of the A.P 5,8,11,14.....is 320	A. 104th B. 106th C. 105th D. 64th
15	Question Image <input style="width: 200px; height: 20px;" type="text"/>	A. an A.P. B. a G.P. C. a H.P. D. None of these

16	If G is a G.M between a and b then a,G,b are in	A. A.P B. H.P C. G.P D. None of these
17	Question Image	
18	$1/2, 1/3, 1/4, 1/5, \dots$ is	A. a geometric sec B. an arithmetic series C. finite sequence D. an infinite sequece
19	The general term of the A.P. is	A. $a + (n - 1) d$ B. $n + (a - 1) d$ C. $d + (n - 1) a$ D. None of these
20	The harmonic mean between a and b is	