

## ECAT Mathematics Chapter 8 Sequences and Series

Sr	Questions	Answers Choice
1	In an A.P, $a + (n-a)d$ is	A. 1st term B. General term C. Last term D. None of these
2	The sum of $n$ terms of a series is denoted by	A. $d$ B. $n$ C. $S_n$ D. $a_n$
3	The $n$ th term of a G.P. is	A. $a r^{n-1}$ B. $a r^{n+1}$ C. $a r^{n-1}$ D. $a r^{n-1}$
4	Write the first four terms of the sequence if $a_n = (-1)^n n^2$	A. -1, 4, -9, 16 B. 1, -4, 9, 16 C. 1, 4, 9, 16 D. None of these
5	The common ration of a geometric sequence cannot be	A. 0 B. 1 C. 2 D. 3
6	An infinite arithmetic series is always	A. Convergent B. Oscillatory C. Divergent D. None of these
7	$1, 1/3, 1/5, 1/7, 1/9, \dots$ is a	A. geometric sequence B. finite sequence C. infinite sequence D. arithmetic series
8	The 6th term of the sequence 7, 9, 12, 16, ... is	A. 27 B. 32 C. 20 D. 19
9	Question Image	A. 15/23 B. 7/15 C. 7/8 D. 15/7
10	Which one represents a sequence	A. $a_n$ B. $S_n$ C. $a(n)$ D. $\{a_n\}$
11	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
12	A sequence of number whose reciprocals form an arithmetic sequence is called	A. Geometric sequence B. Arithmetic series C. Harmonic sequence D. Harmonic series
13	Arithmetic mean between $x - 3$ and $x + 5$ is	A. $x + 1$ B. $x + 2$ C. $x + 3$ D. $x + 4$
14	If the $p$ th, $q$ th, and $r$ th terms of an A.P. are in G.P., then the common ratio of the G.P. is	
15	An infinite sequence has no	A. $n$ th term B. Last term C. Sum D. None of these
16	Question Image	
17	Question Image	

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The  $n$  numbers  $A_1, A_2, A_3, \dots, A_n$  are called  $n$  arithmetic means between  $a$  and  $b$  if  $a, A_1, A_2, A_3, \dots, A_n, b$  is \_\_\_\_\_

- A. An arithmetic series
- B. An arithmetic sequence
- C. A geometric sequence
- D. A harmonic sequence

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If  $a_1, r$  are first term and the common ratio respectively then the sum of an infinite geometric series is

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Which term of the A.P 5, 8, 11, 14, ..... is 320

- A. 104th
- B. 106th
- C. 105th
- D. 64th