

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

Sr	Questions	Answers Choice
1	G is geometric mean between a and b if a, G, b is	A. A.P. B. G.P. C. H.P. D. None of these
2	A number A is said to be the A.M between the two numbers a and b if a, A, b are in	A. A.M B. A.P C. G.P D. G.M
3	The consecutive terms of a progressions are 30, 24, 20. The next term of the progression is	
4	If $S_r$ denotes the sum of the first r terms of a G.P., then $S_n, S_{2n} - S_n, S_{3n} - S_{2n}$ are in	A. A.P. B. G.P. C. H.P. D. None of these
5	If a, b, c are in AP., a, b, c are in G.P. then $A, m^2b, c$ are in	A. A.P. B. G.P. C. H.P. D. None of these
6	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
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
8	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
9	The fifth term of an A.P. Whose first term is 5 and common difference is 3, is	A. 20 B. 17 C. 25 D. 30
10	Sequence also called.....	A. Series B. Function C. progressions D. Elements
11	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
12	Find the next two terms of 7, 9, 12, 16,...	A. 18, 20 B. 19, 22 C. 20, 25 D. 21, 27
13	The formula $a_n = ar^{n-1}$ represents	A. nth term of G.P B. Sum of the first n terms C. G.M between a and b D. None of these
14	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
15	If A is such that a,A,B are in A.P then A is called	A. A.M B. Common ratio C. Common difference D. None of these
16	An A.P., a G.P. and a H.P. have the same first and last terms and the same odd numbers of terms, the middle terms of the three series are in	A. A.P. B. G.P. C. H.P. D. None of these
17	if $a_1 = 3, d = 7$ and $a_n = 59$ , then the number of terms in A.P is	A. 7 B. 9 C. 11 D. 12

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| 18    | Question Image   | A. $2^{2n} - 1$<br>B. $1 - 2^{-n}$<br>C. $n + 2^{-n} - 1$<br>D. $2^n - 1$                   |
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| 19    | A Geometric Series is divergent only if                                      | A. $ r  > 1$<br>B. $ r  \geq 1$<br>C. $ r  = 1$<br>D. None of these                         |
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| 20    | A sequence of number whose reciprocals form an arithmetic sequence is called | A. Geometric sequence<br>B. Arithmetic series<br>C. Harmonic sequence<br>D. Harmonic series |
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