

## ECAT Mathematics Chapter 8 Sequences and Series

Sr	Questions	Answers Choice
1	If the pth, qth, and rth terms of an A.P. are in G.P:., then the common ratio of the G.P. is	
2	Sum of first n terms of an arithmetic series is	
3	Let the sequence 1, 2, 2, 4, 4, 4, 4, 8, 8, 8, 8, 8, 8, 8, 8, where n consecutive terms have the value n, then 1025th term is	A. 2 <sup>9</sup> B. 2 <sup>10</sup> C. 2 <sup>11</sup> D. 2 <sup>8</sup>
4	If x,y are two -ve distinct numbers then	A. A>G>H B. A <g<h a="G=H" c.="" d.="" none="" of="" td="" these<=""></g<h>
5	How many term are there in the A.P, in which $a_1 = 11$ , $a_n = 68$ , $d=3$	A. 30 B. 27 C. 20 D. 21
6	Write the first four terms of the sequence if $a_n = (-1)^n n^2$	A1, 4, -9, 16 B. 1, -4, 9, 16 C. 1, 4, 9, 16 D. None of these
7	Find the geometric mean between 4 and 16	
8	The third term of the sequence a <sub>n</sub> = (-1) <sup>n-1</sup> (n-7) is	A. 8 B. 4 C4 D. 8
9	The fifth term of the sequence a <sub>n</sub> = 2n + 3 is	A. 13 B13 C. 8 D. 3
10	Find the next two terms of 7, 9, 12, 16,	A. 18, 20 B. 19, 22 C. 20, 25 D. 21, 27
11	In following question, a number series is given with one term missing. choose the correct alternative that will same pattern and fill in the blank spaces.1, 4, 9, 16, 25, $x$	A. 35 B. 36 C. 48 D. 49
12	If 6th term of a series in A.P, is -2 and 8th term is -8, the first term of the serie is	A. 13 B13 C. 18 D10
13	No term of a harmonic sequence can be	A. 0 B. 1 C. 2 D. 3
14	If a <sub>n</sub> = 2n -3, write the first four terms	A3, -1, 1, 3 B. 1, 3, 5, 7 C1, 1, 3, 5 D. None of these
15	The sum of first 60 natural numbers is	A. 1830 B. 3660 C. 1640 D. 1770
16	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
17	If $a_1$ , $r$ are first term and the common ratio respectively then the sum of an infinite geometric series is	

18	A series consisting of an unlimited number of terms is termed as an	A. Finite sequence B. Infinite sequence C. <sup>Infinite series</sup> D. geometric sequence
19	Question Image	A. 2 B3/2 C. 1 D. 0
20	No term of a geometric sequence can be	A. 0 B. 1 C. 2 D. 3