

## ECAT Mathematics Chapter 8 Sequences and Series

Sr	Questions	Answers Choice
1	Question Image	A. 1 B. 2 C. 3/2 D. 5/2
2	1, 1/3, 1/5, 1/7, 1/9..... is a	A. geometric sequence B. finite sequence C. infinite sequence D. arithmetic series
3	Question Image	A. 15/23 B. 7/15 C. 7/8 D. 15/7
4	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
5	Let $a_1, a_2, a_3, a_4$ and $a_5$ be such that $a_1, a_2,$ and $a_3$ are in A.P., $a_2, a_3$ and $a_4$ are in G.P and $a_3, a_4$ and $a_5$ are in H.P. Then, $a_1, a_3$ and $a_5$ are in	A. G.P. B. A.P. C. H.P. D. None of these
6	if $a_9 = 19, a_9 = 31$ are the 6th and 9th term of an AP. and $d=4$ is the common difference, then 18th term of the sequence is	A. 65 B. 67 C. 71 D. 75
7	The element range of sequence are called	A. Series B. progression C. Members D. Terms
8	If $x, y$ are two positive distinct numbers then	A. $A > G > H$ B. $A < G < H$ C. $A = G = H$ D. None of these
9	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
10	For an A.P common difference $d$	A. Can be zero B. May or may not zero C. Cannot be zero D. None of these
11	The sum of an infinite geometric series exist if	A. $ r  < 1$ B. $ r  > 1$ C. $r = 1$ D. $r = -1$
12	Question Image	A. 0 B. 1 C. 2 D. 3
13	Question Image	
14	The difference of two consecutive terms of an A.P. is called _____	A. General term B. Common ratio C. Common difference D. None of these
15	Question Image	A. 1, 1/2, 0 B. 1, 2, 1 C. 1, 2, 3 D. 1, 2, 0
16	The next term of the sequence 1, 2, 4, 7, 11, ..... is.	A. 15 B. 16 C. 17

D. 18

- 
- 17 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
- 
- 18 H.M. between 3 and 7 is
- 
- 19 An indicated sum of terms of a sequence is represented by
- A.  $S_n$   
B.  $a_n$   
C.  $S(n)$   
D.  $\{S_n\}$
- 
- 20 If x, y, z are the pth, qth, rth terms of an A.P. and also of G.P., then  $x^{y-z} \cdot y^{z-x} \cdot z^{x-y}$  equals
- A. xyz  
B. 0  
C. 1  
D. None of these
-