

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

Sr	Questions	Answers Choice
1	An infinite arithmetic series is always	A. Convergent B. Oscillatory C. Divergent D. None of these
2	What is the 26th term of the sequence, if its general term is $a_n = (-1)^{n+1}$	A. 2 B. 26 C. 27 D. 1
3	The sum of an infinite geometric series exist if	A. $ r  > 1$ B. $ r  < 1$ C. $r = 1$ D. $r = -1$
4	The 6th term of the sequence 7,9,12,16.....is	A. 27 B. 32 C. 20 D. 19
5	The sum of all 2 digit number is	A. 4750 B. 3776 C. 4895 D. 4905
6	The element range of sequence are called	A. Series B. progression C. Members D. Terms
7	If all members of a sequence are real numbers then it is called a	A. Series B. Function C. Real sequence D. Range
8	The next term of the sequence 1, 2, 4, 7, 11, ..... is.	A. 15 B. 16 C. 17 D. 18
9	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
10	If x,y are two -ve distinct numbers then	A. $A > G > H$ B. $A < G < H$ C. $A = G = H$ D. None of these
11	Which term of the A.P 5,8,11,24.....is 320	A. 104th B. 106th C. 105th D. 64th
12	Every term of a G.P. is positive and also every term is the sum of two preceding terms. Then the common ratio of the G.P. is	
13	In an A.P, $a + (n-a)d$ is	A. 1st term B. General term C. Last term D. None of these
14	If a, b, c are in A.P., then $3^a, 3^b, 3^c$ are in	A. A.P. B. G.P. C. H.P. D. None of these
15	If $a_1, r$ are first term and the common ratio respectively then the sum of an infinite geometric series is	
16	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

17 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

18 

- A. 1
- B. 2
- C. 3/2
- D. 5/2

19 If all members of a sequence are real numbers then it is called

- A. A.P
- B. Real Sequence
- C. G.P
- D. None of these

20 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