

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

Sr	Questions	Answers Choice
1	Question Image	A. 1/2 B. 2 C. 1/4 D. 4
2	Question Image	A. an A.P. B. a G.P. C. a H.P. D. None of these
3	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
4	99th term of the series $2 + 7 + 14 + 23 + 34 + \dots$ is	A. 9998 B. 9999 C. 10000 D. None of these
5	The difference of two consecutive terms of an A.P is called the	A. Common difference B. Common ratio C. Geometric series D. Geometric mean
6	If all members of a sequence are real numbers then it is called a	A. Series B. Function C. Real sequence D. Range
7	p, q, r and s are integers. If the A.M. of the roots of $x^2 - px + q = 0$ and G.M. of the roots of $x^2 - rx + s^2 = 0$ are equal, then	A. q is an odd integer B. r is an even integer C. p is an even integer D. s is an odd integer
8	The sum of first 60 natural numbers is	A. 1830 B. 3660 C. 1640 D. 1770
9	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
10	The sum of an indicated number of terms in a sequence is called	A. sequence B. progression C. Series D. Mean
11	Which one represents a sequence	A. an B. S_n C. $a(n)$ D. $\{a_n\}$
12	The sum of n terms of a series is denoted by	A. d B. n C. S_n D. a_n
13	The sum of first twenty odd integers in A.P is	A. 400 B. 397 C. 404 D. 408
14	The 7th term of the A.P 7,11,15, is	A. 24 B. 31 C. 26 D. 23
15	Question Image	A. A.P. B. G.P.
16	G is geometric mean between a and b if a, G, b is	

16

\sqrt{ab} is geometric mean between a and b if a, \sqrt{ab}, b is

C. H.P.

D. None of these

17

The general term of the A.P. is

A. $a + (n - 1)d$
B. $n + (a - 1)d$
C. $d + (n - 1)a$
D. None of these

18

The numbers of $G_1, G_2, G_3, \dots, G_n$ are called n geometric means between a and b if $a, G_1, G_2, G_3, \dots, G_n, b$ are in

A. H.P.
B. A.P.
C. G.P.
D. None of these

19

An A.P. consists of n (odd terms) and its middle term is m . then the sum of the A.P. is

A. $2mn$
B. $\frac{1}{2}mn$
C. mn
D. mn^2

20

-2, 1, 4, 7, ... is _____

A. Harmonic sequence
B. Arithmetic sequence
C. Geometric sequence
D. Arithmetic series