

ECAT Mathematics Chapter 8 Sequences and Series

Sr	Questions	Answers Choice
1	Question Image	
2	The harmonic mean between a and b is	
3	The element range of sequence are called	A. Series B. progression C. Members D. Terms
4	The 5th and 13th terms of an A.P are 5 and -3 respectively The first term of the A.P is	A. 1 B. -15 C. 9 D. 2
5	The sum of first twenty odd integers in A.P is	A. 400 B. 397 C. 404 D. 408
6	Given two numbers a and b. Let A denote the single A.M. between these and S denote the sum of n A.M.'s between them. Then S/A depends upon	A. n, a, b B. n, a C. n, b D. n
7	Question Image	
8	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
9	$1 + 2 + 3 + \dots + n =$ _____	
10	Write the first four terms of the arithmetic sequence 5, 2, -1, ... is	A. 3 B. -4 C. 7 D. 1
11	The 26th term of the A.P -2, -4, 10, is	A. 136 B. -136 C. 148 D. -148
12	The n numbers $A_1, A_2, A_3, \dots, A_n$ are called an arithmetic means between a and b if $a, A_1, A_2, A_3, \dots, A_n, b$ is _____	A. An arithmetic series B. An arithmetic sequence C. A geometric sequence D. A harmonic sequence
13	Write the first four terms of the sequence if $a_n = (-1)^n n^2$	A. -1, 4, -9, 16 B. 1, -4, 9, 16 C. 1, 4, 9, 16 D. None of these
14	The sum of indicated terms of a sequence is called	A. Arithmetic series B. Series C. Harmonic series D. None of these
15	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
16	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
17	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

$$A. a_{n+1} = (n - 1) d$$

18	The general term of the A.P. is	B. $n + (a_1 - 1) d$ C. $d + (n - 1) a_1$ D. None of these
19	The third term of the sequence $a_n = (-1)^{n-1}(n-7)$ is _____	A. 8 B. 4 C. -4 D. 8
20	An A.P. consists of n (odd terms) and its middle term is m . then the sum of the A.P. is	A. $2 mn$ B. $\frac{1}{2} mn$ C. mn D. mn^2