

ECAT Mathematics Chapter 8 Sequences and Series

Sr	Questions	Answers Choice
1	3, 6, 12,.... is	A. A.P. B. G.P. C. H.P. D. None of these
2	No term of a harmonic sequence can be	A. 0 B. 1 C. 2 D. 3
3	If $a_1 = 3$, $r = 2$, then the n th term of the G.P. is	A. 2.3^{n-1} B. 3.2^n C. 3.2^{n+1} D. 3.2^{n-1}
4	The general term of a sequence is denoted by	A. $a_{1</sub>$ B. $a_{n</sub>$ C. n D. $s_{n</sub>$
5	The third term of a G.P. is the square of first term. If the second term is 8, then the 6th term is	A. 120 B. 124 C. 128 D. 132
6	Sum of n terms of a geometric series if $ r < 1$ is	
7	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
8	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 1 B. 2 C. $3/2$ D. $5/2$
9	The element range of sequence are called	A. Series B. progression C. Members D. Terms
10	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
11	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. $1/2 mn$ C. mn D. mn^2
12	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
13	The numbers of $G_1, G_2, G_3, \dots, G_n$ are called n geometric means between a and b is $a, G_1, G_2, G_3, \dots, G_n, b$ are in	A. H.P. B. A.P. C. G.P. D. None of these
14	The sum of an indicated number of terms in a sequence is called	A. sequence B. progression C. Series D. Mean
15	If three unequal numbers p, q, r are in H.P. and their squares are in A.P., then the ration $p : q : r$ is	
16	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
17	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $15/23$ B. $7/15$ C. $7/8$ D. $15/7$
18	Geometric mean between a and b is	

19 A number A is called the arithmetic mean between a and b if a, A, b is _____

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

20 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