

Mathematics ECAT Pre Engineering Chapter 8 Sequences and Series Online Test

Sr	Questions	Answers Choice
1	If $a_n = 2n - 3$, write the first four terms	A. -3, -1, 1, 3 B. 1, 3, 5, 7 C. -1, 1, 3, 5 D. None of these
2	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
3	If $a^x = b^y = c^z$ and a, b, c are in G.P. then x, y, z are in	A. A.P. B. G.P. C. H.P. D. None of these
4	The three consecutive numbers a, $\sqrt{ab}$, b are in	A. G.P. B. H.P. C. G.M. D. None of these
5	If $\#n = (n-5)^2 + 5$, then find $\#3 \times \#4$.	A. 54 B. 12 C. 4 D. 9
6	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
7	If a, b, c, d, e, f are in A.P., then e-c is equal to	A. $2(c - a)$ B. $2(f - d)$ C. $2(d - c)$ D. d - c
8	The sum of n terms of a series is denoted by	A. d B. n C. S_n D. a_n
9	Question Image	
10	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
11	Sequence also called.....	A. Series B. Function C. progressions D. Elements
12	Let the sequence 1, 2, 2, 4, 4, 4, 4, 8, 8, 8, 8, 8, 8, where n consecutive terms have the value n, then 1025th term is	A. 2^9 B. 2^{10} C. 2^{11} D. 2^8
13	If p, q, r and in A.P., a is G.M. between p and q and b is G.M. between q and r, then a^2, q^2, b^2 are in	A. A.P. B. G.P. C. H.P. D. None of these
14	The 6th term of an arithmetic sequence whose first term is 3 and common difference in zero is	A. 18 B. 6 C. 3 D. 0
15	Question Image	
16	Which term of the A.P 5, 8, 11, 14, is 320	A. 104th B. 106th C. 105th D. 64th

17	Question Image	A. A.P. B. G.P. C. H.P. D. None of these
18	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
19	Arithmetic mean between $x - 3$ and $x + 5$ is	A. $x + 1$ B. $x + 2$ C. $x + 3$ D. $x + 4$
20	If the pth, qth, and rth terms of an A.P. are in G.P., then the common ratio of the G.P. is	