ECAT Mathematics Chapter 8 Sequences and Series

Sr	Questions	Answers Choice
1	Sum of first n terms of an arithmetic series is	
2	The general term of the A.P. is	A. a_1 + (n - 1) d B. n + (a_1 - 1) d C. d + (n - 1) a_1 D. None of these
3	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
4	If a,b,c are in arithmetic progression, then 1/a,1/b.1/c are in	A. A.M B. G.M C. H.M D. G.P
5	Question Image	
6	The 5thand 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
7	The A.M. of two numbers is 34 and G.M. is 16, the numbers are	A. 2 and 64 B. 64 and 3 C. 64 and 4 D. None of these
8	If #n = (n-5)2 + 5, then find #3 x #4.	A. 54 B. 12 C. 4 D. 9
9	The 6th term of the sequence 7,9,12,16......is	A. 27 B. 32 C. 20 D. 19
10	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
11	Question Image	
12	99th term of the series 2 + 7 + 14 + 23 + 34 + ... is	A. 9998 B. 9999 C. 10000 D. None of these
13	Sequence also called..............	A. Series B. Function C. progressions D. Elements
14	3, 6, 12,.... is	A. A.P B. G.P. C. H.P. D. None of these
15	The harmonic mean between a and b is	
16	Question Image	A. 1, 1/2, 0 B. 1, 2, 1 C. 1, 2, 3 D. 1, 2, 0
17	A number A is said to be the A.M between the two numbers a and b if a, A, b are in	A. A.M B. A.P C. G.P D. G.M
		A. 2 mn

18	An A.P. consists of n(odd terms) and its middle term is m. then the sum of the A.P. is	B. 1/2 mn C. mn D. mn^2
19	an - an-1 will be common difference in an A.P if	A. n = 1 $\forall$ n $\in$ N B. n>1 $\wedge$ n $\in$ N C. n $\in$ Z D. None of the above
20	If x,y are two positive distinct numbers then	A. A>G>H B. A<G<H C. A=G=H D. None of these