Mathematics ECAT Pre Engineering Chapter 8 Sequences and Series Online Test

Sr	Questions	Answers Choice
1	Which one represents a sequence	A. an B. Sn C. a(n) D. {an}
2	An indicated sum of terms of a sequence is represented by	A. Sn B. an C. S(n) D. {Sn}
3	An infinite sequence has no	A. nth term B. Last term C. Sum D. None of these
4	The formula an = a +(n-1)d for an A.P is called	A. nth term of an A.P B. Sum of first n terms C. A,M between a and b D. None of the above
5	The formula an = arn-1represents	A. nth term of G.P B. Sum of the first n terms C. G.M between a and b D. None of these
6	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
7	The three consecutive numbers a,√ab,b are in	A. G.P B. H.P C. G.M D. None of these
8	A Geometric Series is divergent only if	A. |r|>1 B. |r|≥1 C. |r|=1 D. None of these
9	A Series which does not coverage to a Unique sum is called	A. Harmonic Series B. Oscillatroy Series C. Arithmetic Series D. None of these
10	A sequence whose reciprocal is an A.P is called	A. Oscillator B. H.P C. G.P D. None of these
11	A,G,H are in	A. A.P B. G.P C. H.P D. None of these
12	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
13	If x,y are two -ve distinct numbers then	A. A>G>H B. A<G<H C. A=G=H D. None of these
14	If all members of a sequence are real numbers then it is called	A. A.P B. Real Sequence C. G.P D. None of these
15	an -an-1,∀n∈N∧n>1 in an A.P is called	A. Common difference B. nth term C. Common ratio D. None of these

16	In an A.P,a +(n-a)d is	A. 1st term B. General term C. Last term D. None of these
17	If A is such that a,A,B are in A.P then A is called	A. A.M B. Common ratio C. Common difference D. None of these
18	For three consecutive terms in A.P middle term is called	A. A.M B. nth term C. Central term D. None of these
19	an - an-1 will be common difference in an A.P if	A. n = 1 ∀ n∈ N B. n>1 ∧ n∈N C. n∈Z D. None of the above
20	The sum of indicated terms of a sequence is called	A. Arithmetic series B. Series C. Harmonic series D. None of these
21	The sum of infinite numbers of terms of an arithmetic series is	A. Finite B. Infinite C. May or may not finite D. None of these
22	If Sn is a definite number as n → ∞,then the geometric series is	A. Convergent B. Divergent C. Oscillatroy D. None of these
23	An infinite arithmetic series is always	A. Convergent B. Oscillatory C. Divergent D. None of these
24	For an arithmetic series to be convergent it is necessary that the series has	A. Finite terms B. d<0 C. Infinite terms D. None of these
25	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
26	How many numbers are there between 103 and 750 which are divisible by 6	A. 125 B. 107 C. 108 D. 113
27	The sum of first 60 natural numbers is	A. 1830 B. 3660 C. 1640 D. 1770
28	The sum of all 2 digit number is	A. 4750 B. 3776 C. 4895 D. 4905
29	Which term of the A.P 5,8,11,24.............is 320	A. 104th B. 106th C. 105th D. 64th
30	The5thand 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
31	The nth term of an A.P is (3n+5) Its 75th term is	A. 26 B. 7 C. 21 D. Cannot be determined
32	The sides of a right angled triangle are in A.P The ratio of sides is	A. 1:2:3 B. 3:4:5 C. 2:3:4 D. 5:8:3
33	If #n = (n-5)2 + 5, then find #3 x #4.	A. 54 B. 12 C. 4

		D. 9
34	A function whose domain is a subset of natural numbers is called _____	A. Identity function B. Sequence C. Onto function D. Series
35	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
36	Question Image	
37	Find the next two terms of 7, 9, 12, 16,...	A. 18, 20 B. 19, 22 C. 20, 25 D. 21, 27
38	The general term of a sequence is denoted by	A. a_1 B. a_n C. n D. s_n
39	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
40	The difference of two consecutive terms of an A.P. is called _____	A. General term B. Common ratio C. Common difference D. None of these
41	-2, 1, 4, 7,.... is _____	A. Harmonic sequence B. Arithmetic sequence C. Geometric sequence D. Arithmetic series
42	Arithmetic mean between a and b is	
43	The n numbers $A_1, A_2, A_3, ... A_n$ are called an arithmetic means between a and b if a.$A_1, A_2, A_3 ..... A_n$, b is _____	A. An arithmetic series B. An arithmetic sequence C. A geometric sequence D. A harmonic sequence
44	Sum of first n terms of an arithmetic series is	
45	Question Image	
46	Arithmetic mean between x - 3 and x + 5 is	A. x + 1 B. x + 2 C. x + 3 D. x + 4
47	Write the first four terms of the arithmetic sequence 5, 2, -1, ... is	A. 3 B. -4 C. 7 D. 1
48	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
49	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
50	The series obtained by adding the terms of an arithmetic sequence is called the	A. Infinite series B. Harmonic series C. Geometric series D. Arithmetic series
51	The sum of n terms of a series is denoted by	A. d B. n C. S_n D. a_n
52	The nth term of a G.P. is	A. $a_1 r^n$ B. $a_1 r^{n+1}$ C. $a_1 r^{n-1}$ D. $a_1 r^{-n}$
53	3, 6, 12,.... is	A. A.P B. G.P. C. H.P.

		D. None of these
54	Geometric mean between a and b is	
55	G is geometric mean between a and b if a, G, b is	A. A.P. B. G.P. C. H.P. D. None of these
56	The numbers of G_1, G_2, G_3...... $G_n$are called n geometric means between a and b is a, G_1, G_2,G_3, ... G_n, b are in	A. H.P. B. A.P. C. G.P. D. None of these
57	Find the geometric mean between 4 and 16	
58	Question Image	
59	Sum of n terms of a geometric series if $| r | < 1$ is	
60	No term of a geometric sequence can be	A. 0 B. 1 C. 2 D. 3
61	The common ration of a geometric sequence cannot be	A. 0 B. 1 C. 2 D. 3
62	If $a_1$and r are the first term and the common ratio respectively then (n + 1)th term of the G.P. is	A. 0 B. $a_1 r^{n-1}$ C. $a_1 r^{n+1}$ D. $a_1 r^{n}$
63	If a_1, r are first term and the common ratio respectively then the sum of an infinite geometric series is	
64	The sum of an infinite geometric series exist if	A. $| r | < 1$ B. $| r | > 1$ C. r = 1 D. r = -1
65	The series obtained by adding the terms of a geometric sequence is called	A. Infinite series B. Arithmetic series C. Geometric series D. Harmonic series
66	Question Image	A. 0 B. 1 C. 2 D. 3
67	Find the sum of the infinite geometric series 2 + 1 + 0.5 + ...	A. 3.5 B. 3 C. 4 D. None of these
68	A sequence of number whose reciprocals form an arithmetic sequence is called	A. Geometric sequence B. Arithmetic series C. Harmonic sequence D. Harmonic series
69	No term of a harmonic sequence can be	A. 0 B. 1 C. 2 D. 3
70	Question Image	A. an A.P. B. a G.P. C. a H.P. D. None of these
71	The harmonic mean between a and b is	
72	H.M. between 3 and 7 is	
73	A number H is said to be the H.M. between a and b if a, H, b are in	A. A.P. B. G. P. C. H. P. D. None of these
74	H_1, H_2, H_3, ... $H_n$are called n harmonic means between a and b if a, H_1, H_2, H_3, ... H_nb are in	A. H.P. B. G.P. C. A.P. D. None of these
		A. A.P.

75	If A, G, H are the arithmetic, geometric and harmonic means between a and b respectively then A, G, H are in	A. A. P. B. G. P. C. H. P. D. None of these
76	Question Image	
77	Question Image	
78	Question Image	
79	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
80	Question Image	A. 1, 1/2, 0 B. 1, 2, 1 C. 1, 2, 3 D. 1, 2, 0
81	Question Image	A. 2 B. -3/2 C. 1 D. 0
82	If a_1, r and a_n are the first term, common ratio and the nth term respectively of a G. P. then a_n=	A. $a_1 r^n$ B. $a_1 r^{n-1}$ C. $a_1 r^{n+1}$ D. $a_1 r$
83	If a_1= 3, r = 2, then the nth 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}
84	The fifth term of the sequence a_n= 2n + 3 is _____	A. 13 B. -13 C. 8 D. 3
85	The third term of the sequence a_n= $(-1)^{n-1}$(n-7) is _____	A. 8 B. 4 C. -4 D. 8
86	1 + 2 + 3 + ... + n = _____	
87	p, q, r and s are integers. If the A.M. of the roots of x^2- px + q^2= 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
88	The next term of the sequence 1, 2, 4, 7, 11, ... is.	A. 15 B. 16 C. 17 D. 18
89	If a, b, c are in A.P., then 3^a, 3^b, 3^c are in	A. A.P. B. G.P. C. H.P. D. None of these
90	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
91	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. 1/2 mn C. mn D. mn^2
92	5th term of a G.P. is 2, then the product of first 9 terms is	A. 256 B. 128 C. 512 D. None of these
93	The third term of a G.P. is 4, The product of first five terms is	A. 43 B. 45 C. 46 D. None of these
94	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

95	If S_r denotes the sum of the first r terms of a G.P., then S_n, $S_{2n}- S_n$, $S_{3n}- S_{2n}$ are in	A. A.P. B. G.P. C. H.P. D. None of these
96	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
97	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
98	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
99	Let S_n denote the sum of the first n terms of an A.P. If $S_{2n}= 3 S_n$: S_n is equal to	A. 4 B. 6 C. 8 D. 10
100	If x, y, z are the pth, qth, rth terms of an A.P. and also of G.P., then $x^{y-z}. y^{z-x}. z^{x-y}$ eqals	A. xyz B. 0 C. 1 D. None of these
101	Question Image	A. 15/23 B. 7/15 C. 7/8 D. 15/7
102	Question Image	A. 12 B. 13 C. 14 D. 15
103	Question Image	A. A.P. B. G.P. C. H.P. D. None of these
104	99th term of the series 2 + 7 + 14 + 23 + 34 + ... is	A. 9998 B. 9999 C. 10000 D. None of these
105	If P, Q, R be the A.M., G.M., H.M. respectively between any two rational numbers a and b, then P - Q is	
106	Question Image	
107	Question Image	A. 1 B. 2 C. 3/2 D. 5/2
108	If the pth, qth, and rth terms of an A.P. are in G.P:., then the common ratio of the G.P. is	
109	pth term of an H.P. is qr and qth term is pr then the rth term of the H.P. is	A. pqr B. 1 C. pq D. pqr²
110	If $a_1= a_2= 2$, $a_n= a_{n-1}- 1$ (n > 2), then a_5 is	A. 1 B. 0 C. -1 D. -2
111	If a, b, c are in AP., a, b, c are in G.P. then A, m^2b, c are in	A. A.P. B. G.P. C. H.P. D. None of these
112	Question Image	A. 2²- n - 1 B. 1 - 2⁻ⁿ C. n + 2⁻ⁿ-1 D. 2ⁿ- 1
113	Every term of a G.P. is positive and also every term is the sum of two preceding terms. Then the common ratio of the G.P. is	
114	The consecutive terms of a progressions are 30, 24, 20. The next term of the progression is	
115	If three unequal numbers p, q, r are in H.P. and their squares are in A.P., then the ration p :	

116	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
117	The 10th common term between the series 3+7+11+....... and 1 + 6 +11 + ... is	A. 191 B. 193 C. 211 D. None of these
118	If b_1, b_2, b_3, ... are in G.P. with first term unity and common ratio r, then the minimum value of b_1- b_3+ b_5 is equal to	A. 3/4 B. 1/4 C. 1 D. None of these
119	Three consecutive terms of a progression are 30, 24, 20. The next terms of the progression is	
120	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
121	Question Image	
122	The sum of the squares of three distinct real numbers, which are in G.P., is S^2. if their sum is αS then	
123	Question Image	A. 1/2 B. 2 C. 1/4 D. 4
124	Question Image	
125	An A.P., a G.P. and a H.P. have the same first and last terms and the same odd numbers of terms, the middle terms of the three series are in	A. A.P. B. G.P. C. H.P. D. None of these
126	Let the sequence 1, 2, 2, 4, 4, 4, 4, 8, 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
127	The number of divisors of 1029, 1547 and 122 are in	A. A.P. B. G.P. C. H.P. D. None of these
128	The number of divisors of 1029, 1547 and 122 are in	A. A.P. B. G.P. C. H.P. D. None of these
129	Sequence also called..............	A. Series B. Function C. progressions D. Elements
130	A sequence is a functions whose domain is a subset of the set of	A. Natural numbers B. Real numbers C. Whole numbers D. Rational numbers
131	If all members of a sequence are real numbers then it is called a	A. Series B. Function C. Real sequence D. Range
132	A sequence having no last term is called	A. arithmetic sequence B. Geometric sequence C. Finite sequence D. Infinite sequence
133	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
134	1,1/3,1/5,1/7,1/9..... is a	A. geometric sequence B. finite sequence C. infinite sequence D. arithmetic series

A. Series

135	The element range of sequence are called	A. Series B. progression C. Members D. Terms
136	The 6th term of the sequence 7,9,12,16......is	A. 27 B. 32 C. 20 D. 19
137	1/2,1/3,1/4,1/5.........is	A. a geometric sec B. an arithmetric series C. finite sequence D. an infinite sequece
138	What is the 26th term of the sequence, if its general term is $a_n = (-1)^{n+1}$	A. 2 B. 26 C. 27 D. 1
139	The sixth term of the sequence 1,3,12,60....is	A. 1500 B. 72 C. 2160 D. 2520
140	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
141	The fifth term of an A.P. Whose first term is 5 and common difference is 3,is	A. 20 B. 17 C. 25 D. 30
142	The seventh term of an A.P whose first term is P and common difference is q. is	A. P-6q B. P+6q C. P-4q D. P-nq
143	The sum of first twenty odd integers in A.P is	A. 400 B. 397 C. 404 D. 408
144	The 31 term of the A.P 5,2,-1.....is	A. -82 B. 82 C. 85 D. -85
145	The 26th term of the A.P -2,-4,10,.............is	A. 136 B. -136 C. 148 D. -148
146	if a_9 =19,a9=31 are the 6th and 9th term of an A.P. and d=4 is the common difference, then 18th term of the sequence is	A. 65 B. 67 C. 71 D. 75
147	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
148	The nth term of an A.P., is 12-4n. Its common difference is	A. 8 B. 4 C. 4 D. 16
149	The 7th term of the A.P 7,11,15,is	A. 24 B. 31 C. 26 D. 23
150	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
151	If 6th term of a series in A.P, is -2 and 8th term is -8, the first term of the serie is	A. 13 B. -13 C. 18 D. -10
152	if a_1 =3, d=7 and a_n =59 , then the number of terms in A.P is	A. 7 B. 9 C. 11 D. 13

153	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
154	If 5,7 and 9 are A.Ms between a and b, then a and b is equal to	A. 2 and 12 B. 1 and 10 C. 3 and 11 D. -7 and 2
155	The sum of an indicated number of terms in a sequence is called	A. sequence B. progression C. Series D. Mean
156	A series consisting of an unlimited number of terms is termed as an	A. Finite sequence B. Infinite sequence C. ^{Infinite series} D. geometric sequence
157	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
158	Which one represents a sequence	A. an B. Sn C. a(n) D. {an}
159	An indicated sum of terms of a sequence is represented by	A. Sn B. an C. S(n) D. {Sn}
160	An infinite sequence has no	A. nth term B. Last term C. Sum D. None of these
161	The formula an = a +(n-1)d for an A.P is called	A. nth term of an A.P B. Sum of first n terms C. A,M between a and b D. None of the above
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168	A,G,H are in	A. A.P B. G.P C. H.P D. None of these
169	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
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171	If all members of a sequence are real numbers then it is called	A. A.P B. Real Sequence C. G.P D. None of these
172	an -an-1,∀n∈N∧n>1 in an A.P is called	A. Common difference B. nth term C. Common ratio D. None of these
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174	If A is such that a,A,B are in A.P then A is called	A. A.M B. Common ratio C. Common difference D. None of these
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183	How many numbers are there between 103 and 750 which are divisible by 6	A. 125 B. 107 C. 108 D. 113
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186	Which term of the A.P 5,8,11,24.............is 320	A. 104th B. 106th C. 105th D. 64th
187	The5thand 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
		A. 26 B. 5

188	The nth term of an A.P is (3n+5) Its 75th term is	B. 7 C. 21 D. Cannot be determined
189	The sides of a right angled triangle are in A.P The ratio of sides is	A. 1:2:3 B. 3:4:5 C. 2:3:4 D. 5:8:3
190	If #n = (n-5)2 + 5, then find #3 x #4.	A. 54 B. 12 C. 4 D. 9
191	A function whose domain is a subset of natural numbers is called _____	A. Identity function B. Sequence C. Onto function D. Series
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194	Find the next two terms of 7, 9, 12, 16,...	A. 18, 20 B. 19, 22 C. 20, 25 D. 21, 27
195	The general term of a sequence is denoted by	A. a_1 B. a_n C. n D. s_n
196	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
197	The difference of two consecutive terms of an A.P. is called _____	A. General term B. Common ratio C. Common difference D. None of these
198	-2, 1, 4, 7,.... is _____	A. Harmonic sequence B. Arithmetic sequence C. Geometric sequence D. Arithmetic series
199	Arithmetic mean between a and b is	
200	The n numbers $A_1, A_2, A_3, ...A_n$ are called an arithmetic means between a and b if a.$A_1, A_2, A_3.....A_n$, b is _____	A. An arithmetic series B. An arithmetic sequence C. A geometric sequence D. A harmonic sequence
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203	Arithmetic mean between x - 3 and x + 5 is	A. x + 1 B. x + 2 C. x + 3 D. x + 4
204	Write the first four terms of the arithmetic sequence 5, 2, -1, ... is	A. 3 B. -4 C. 7 D. 1
205	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
206	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
207	The series obtained by adding the terms of an arithmetic sequence is called the	A. Infinite series B. Harmonic series C. Geometric series D. Arithmetic series
		A. d B. n

208	The sum of n terms of a series is denoted by	B. n C. S_n D. a_n
209	The nth term of a G.P. is	A. $a_1 r^n$ B. $a_1 r^{n+1}$ C. $a_1 r^{n-1}$ D. $a_1 r^{-n}$
210	3, 6, 12,.... is	A. A.P B. G.P. C. H.P. D. None of these
211	Geometric mean between a and b is	
212	G is geometric mean between a and b if a, G, b is	A. A.P. B. G.P. C. H.P. D. None of these
213	The numbers of G_1, G_2, G_3...... G_n are called n geometric means between a and b is a, G_1, G_2, G_3, ... G_n, b are in	A. H.P. B. A.P. C. G.P. D. None of these
214	Find the geometric mean between 4 and 16	
215	Question Image	
216	Sum of n terms of a geometric series if $|r| < 1$ is	
217	No term of a geometric sequence can be	A. 0 B. 1 C. 2 D. 3
218	The common ration of a geometric sequence cannot be	A. 0 B. 1 C. 2 D. 3
219	If a_1 and r are the first term and the common ratio respectively then (n + 1)th term of the G.P. is	A. 0 B. $a_1 r^{n-1}$ C. $a_1 r^{n+1}$ D. $a_1 r^n$
220	If a_1, r are first term and the common ratio respectively then the sum of an infinite geometric series is	
221	The sum of an infinite geometric series exist if	A. $|r| < 1$ B. $|r| > 1$ C. $r = 1$ D. $r = -1$
222	The series obtained by adding the terms of a geometric sequence is called	A. Infinite series B. Arithmetic series C. Geometric series D. Harmonic series
223	Question Image	A. 0 B. 1 C. 2 D. 3
224	Find the sum of the infinite geometric series 2 + 1 + 0.5 + ...	A. 3.5 B. 3 C. 4 D. None of these
225	A sequence of number whose reciprocals form an arithmetic sequence is called	A. Geometric sequence B. Arithmetic series C. Harmonic sequence D. Harmonic series
226	No term of a harmonic sequence can be	A. 0 B. 1 C. 2 D. 3
227	Question Image	A. an A.P. B. a G.P. C. a H.P. D. None of these
228	The harmonic mean between a and b is	
229	H.M. between 3 and 7 is	

230	A number H is said to be the H.M. between a and b if a, H, b are in	A. A.P. B. G. P. C. H. P. D. None of these
231	H_1, H_2, H_3, ... H_n are called n harmonic means between a and b if a, H_1, H_2, H_3, ... H_nb are in	A. H.P. B. G.P. C. A.P. D. None of these
232	If A, G, H are the arithmetic, geometric and harmonic means between a and b respectively then A, G, H are in	A. A. P. B. G. P. C. H. P. D. None of these
233	Question Image	
234	Question Image	
235	Question Image	
236	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
237	Question Image	A. 1, 1/2, 0 B. 1, 2, 1 C. 1, 2, 3 D. 1, 2, 0
238	Question Image	A. 2 B. -3/2 C. 1 D. 0
239	If a_1, r and a_n are the first term, common ratio and the nth term respectively of a G. P. then a_n=	A. $a_1 r^n$ B. $a_1 r^{n-1}$ C. $a_1 r^{n+1}$ D. $a_1 r$
240	If a_1= 3, r = 2, then the nth 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}
241	The fifth term of the sequence a_n= 2n + 3 is _____	A. 13 B. -13 C. 8 D. 3
242	The third term of the sequence a_n= $(-1)^{n-1}$(n-7) is _____	A. 8 B. 4 C. -4 D. 8
243	1 + 2 + 3 + ... + n = _____	
244	p, q, r and s are integers. If the A.M. of the roots of x2- px + q2= 0 and G.M. of the roots of x2- rx + s2= 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
245	The next term of the sequence 1, 2, 4, 7, 11, ... is.	A. 15 B. 16 C. 17 D. 18
246	If a, b, c are in A.P., then 3^a, 3^b, 3^c are in	A. A.P. B. G.P. C. H.P. D. None of these
247	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
248	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. 1/2 mn C. mn D. mn^2
249	5th term of a G.P. is 2, then the product of first 9 terms is	A. 256 B. 128 C. 512 D. None of these

250	The third term of a G.P. is 4, The product of first five terms is	A. 43 B. 45 C. 46 D. None of these
251	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
252	If S_r denotes the sum of the first r terms of a G.P., then S_n, $S_{2n}- S_n$, $S_{3n}- S_{2n}$ are in	A. A.P. B. G.P. C. H.P. D. None of these
253	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
254	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
255	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
256	Let S_n denote the sum of the first n terms of an A.P. If $S_{2n}= 3 S_n$: S_n is equal to	A. 4 B. 6 C. 8 D. 10
257	If x, y, z are the pth, qth, rth terms of an A.P. and also of G.P., then x^{y-z}. y^{z-x}. z^{x-y} eqals	A. xyz B. 0 C. 1 D. None of these
258	Question Image	A. 15/23 B. 7/15 C. 7/8 D. 15/7
259	Question Image	A. 12 B. 13 C. 14 D. 15
260	Question Image	A. A.P. B. G.P. C. H.P. D. None of these
261	99th term of the series 2 + 7 + 14 + 23 + 34 + ... is	A. 9998 B. 9999 C. 10000 D. None of these
262	If P, Q, R be the A.M., G.M., H.M. respectively between any two rational numbers a and b, then P - Q is	
263	Question Image	
264	Question Image	A. 1 B. 2 C. 3/2 D. 5/2
265	If the pth, qth, and rth terms of an A.P. are in G.P:., then the common ratio of the G.P. is	
266	pth term of an H.P. is qr and qth term is pr then the rth term of the H.P. is	A. pqr B. 1 C. pq D. pqr^2
267	If $a_1= a_2= 2$, $a_n= a_{n-1}- 1$ (n > 2), then a_5 is	A. 1 B. 0 C. -1 D. -2
268	If a, b, c are in AP., a, b, c are in G.P. then A, m^2b, c are in	A. A.P. B. G.P. C. H.P. D. None of these

| 269 | Question Image | A. $2^2 - n - 1$
B. $1 - 2^{-n}$
C. $n + 2^{-n} - 1$
D. $2^n - 1$ |

270 Every term of a G.P. is positive and also every term is the sum of two preceding terms. Then the common ratio of the G.P. is

271 The consecutive terms of a progressions are 30, 24, 20. The next term of the progression is

272 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

| 273 | 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 |

| 274 | The 10th common term between the series 3+7+11+....... and 1 + 6 +11 + ... is | A. 191
B. 193
C. 211
D. None of these |

| 275 | If b_1, b_2, b_3, ... are in G.P. with first term unity and common ratio r, then the minimum value of $b_1 - b_3 + b_5$ is equal to | A. 3/4
B. 1/4
C. 1
D. None of these |

276 Three consecutive terms of a progression are 30, 24, 20. The next terms of the progression is

| 277 | 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 |

278 Question Image

279 The sum of the squares of three distinct real numbers, which are in G.P., is S^2. if their sum is αS then

| 280 | Question Image | A. 1/2
B. 2
C. 1/4
D. 4 |

281 Question Image

| 282 | An A.P., a G.P. and a H.P. have the same first and last terms and the same odd numbers of terms, the middle terms of the three series are in | A. A.P.
B. G.P.
C. H.P.
D. None of these |

| 283 | Let the sequence 1, 2, 2, 4, 4, 4, 4, 8, 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 |

| 284 | The number of divisors of 1029, 1547 and 122 are in | A. A.P.
B. G.P.
C. H.P.
D. None of these |

| 285 | The number of divisors of 1029, 1547 and 122 are in | A. A.P.
B. G.P.
C. H.P.
D. None of these |

| 286 | Sequence also called.............. | A. Series
B. Function
C. progressions
D. Elements |

| 287 | A sequence is a functions whose domain is a subset of the set of | A. Natural numbers
B. Real numbers
C. Whole numbers
D. Rational numbers |

| 288 | If all members of a sequence are real numbers then it is called a | A. Series
B. Function
C. Real sequence
D. Range |

| 289 | A sequence having no last term is called | A. arithmetic sequence
B. Geometric sequence
C. Finite sequence
D. Infinite sequence |

290	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
291	1,1/3,1/5,1/7,1/9..... is a	A. geometric sequence B. finite sequence C. infinite sequence D. arithmetic series
292	The element range of sequence are called	A. Series B. progression C. Members D. Terms
293	The 6th term of the sequence 7,9,12,16......is	A. 27 B. 32 C. 20 D. 19
294	1/2,1/3,1/4,1/5.........is	A. a geometric sec B. an arithmetric series C. finite sequence D. an infinite sequece
295	What is the 26th term of the sequence, if its general term is $a_n = (-1)^{n+1}$	A. 2 B. 26 C. 27 D. 1
296	The sixth term of the sequence 1,3,12,60....is	A. 1500 B. 72 C. 2160 D. 2520
297	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
298	The fifth term of an A.P. Whose first term is 5 and common difference is 3,is	A. 20 B. 17 C. 25 D. 30
299	The seventh term of an A.P whose first term is P and common difference is q. is	A. P-6q B. P+6q C. P-4q D. P-nq
300	The sum of first twenty odd integers in A.P is	A. 400 B. 397 C. 404 D. 408
301	The 31 term of the A.P 5,2,-1.....is	A. -82 B. 82 C. 85 D. -85
302	The 26th term of the A.P -2,-4,10,............is	A. 136 B. -136 C. 148 D. -148
303	if $a_9 =19, a_9=31$ are the 6th and 9th term of an A.P. and d=4 is the common difference, then 18th term of the sequence is	A. 65 B. 67 C. 71 D. 75
304	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
305	The nth term of an A.P., is 12-4n. Its common difference is	A. 8 B. 4 C. 4 D. 16
306	The 7th term of the A.P 7,11,15,is	A. 24 B. 31 C. 26 D. 23
307	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

308	If 6th term of a series in A.P, is -2 and 8th term is -8, the first term of the serie is	A. 13 B. -13 C. 18 D. -10
309	if a_1 =3, d=7 and a_n =59 , then the number of terms in A.P is	A. 7 B. 9 C. 11 D. 13
310	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
311	If 5,7 and 9 are A.Ms between a and b, then a and b is equal to	A. 2 and 12 B. 1 and 10 C. 3 and 11 D. -7 and 2
312	The sum of an indicated number of terms in a sequence is called	A. sequence B. progression C. Series D. Mean
313	A series consisting of an unlimited number of terms is termed as an	A. Finite sequence B. Infinite sequence C. ^{Infinite series} D. geometric sequence
314	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