

**WANDOOR GANITHAM - CLASS X - UNIT TEST 2021 - 22****101AE****ARITHMETIC SEQUENCES – ANSWER KEY**

Qn no:	Key	Score	
<b>For questions from 1 to 2 carries one score each</b>			
1	99	1	1
2	5	1	1
<b>For questions from 3 to 5 carries two score each</b>			
3	a) 9 , 17 , 25 , . . . b) $9 + 15 \times 8 = 129$	1 1	2
4	a) $\frac{49 - 17}{12 - 4} = \frac{32}{8} = 4$ b) $17 + 4 \times 4 = 33$ or $49 - 4 \times 4 = 33$	1 1	2
5	a) $x_2 + x_{19} = 65$ b) $10 \times 65 = 650$	1 1	2
<b>For questions from 6 to 9 carries three score each</b>			
6	a) 7 b) $7n + 2$ c) 2	1 1 1	3
7	a) $\frac{15}{3} = 5$ b) $\frac{63}{7} = 9$ c) $\frac{9 - 5}{4 - 2} = \frac{4}{2} = 2$	1 1 1	3

8	a) 6	1	3
	b) $6 \times \frac{n \times (n+1)}{2} + 2n$	1	
	$3n^2 + 5n$	1	
<b>For questions from 9 to 11 carries four score each</b>			
9	a) $\frac{20 \times 21}{2} = 210$	1	4
	b) $2 \times 210 = 420$	1	
	c) $420 + 3 \times 20 = 480$	1	
	d) $210 + 420 + 480 = 1110$	1	
10	a) 5	1	4
	b) 11	1	
	c) 96	1	
	d) 18	1	
11	a) 3	1	4
	b) 3	1	
	c) Difference between the first terms = 2	1	
	$20 \times 2 = 40$	1	
<b>Question 12 carries five score</b>			
12	a) 11 12 13 14 15 16 17 18 19 20 21	1	5
	b) $\frac{14 \times 15}{2} = 105$	1	
	c) 106	1	
	d) 15	1	
	e) $106 + 14 = 120$ or $\frac{15 \times 16}{2} = 120$	1	

**Question 13 carries six score**

**13**

5	15	25
9	19	29
13	23	33

**1**

**3**

**2**

**6**

WANDOOR GANITHAM