

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

Qn no:	Key	Score	
For questions from 1 to 2 carries one score each			
1	99	1	1
2	5	1	1
For questions from 3 to 5 carries two score each			
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
For questions from 6 to 9 carries three score each			
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	<p>a) 6</p> <p>b) $6 \times \frac{n \times (n+1)}{2} + 2n$</p> <p>$3n^2 + 5n$</p>	1 1 1	3
For questions from 9 to 11 carries four score each			
9	<p>a) $\frac{20 \times 21}{2} = 210$</p> <p>b) $2 \times 210 = 420$</p> <p>c) $420 + 3 \times 20 = 480$</p> <p>d) $210 + 420 + 480 = 1110$</p>	1 1 1 1	4
10	<p>a) 5</p> <p>b) 11</p> <p>c) 96</p> <p>d) 18</p>	1 1 1 1	4
11	<p>a) 3</p> <p>b) 3</p> <p>c) Difference between the first terms = 2</p> <p>$20 \times 2 = 40$</p>	1 1 1 1	4
Question 12 carries five score			
12	<p>a) 11 12 13 14 15</p> <p>16 17 18 19 20 21</p> <p>b) $\frac{14 \times 15}{2} = 105$</p> <p>c) 106</p> <p>d) 15</p> <p>e) $106 + 14 = 120$ or $\frac{15 \times 16}{2} = 120$</p>	1 1 1 1 1	5

Question 13 carries six score

13

5	15	25
9	19	29
13	23	33

1

3

2

6

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