



Chapter 3 - Arithmetic progression

1) The sequence  $-10, -6, -2, 2, \dots$

A) is an A.P., Reason  $d = -16$

**B) is an A.P., Reason  $d = 4$**

C) is an A.P., Reason  $d = -4$

D) is not an A.P.

2) First four terms of an A.P. are  $\dots$ , whose first term is  $-2$  and common difference is  $-2$

A)  $-2, 0, 2, 4$

B)  $-2, 4, -8, 16$

**C)  $-2, -4, -6, -8$**

D)  $-2, -4, -8, -16$

3) What is the sum of first 30 natural numbers?

A) 464

**B) 465**

C) 462

D) 461

4) For an given A.P.,  $t_7 = 4$  and  $d = -4$  then  $a = ?$

A) 6

B) 7

C) 20

**D) 28**

5) For an given A.P.  $a = 3.5$ ,  $d = 0$ ,  $n = 10$  then  $t_n = ?$

A) 0

**B) 3.5**

C)  $103.5$

D)  $104.5$

6) In an A.P. first two terms are  $-3, 4$  then  $t_{21}$  is —

A)  $-143$

B)  $143$

**C) 137**

D) 17

7) For any A.P.  $d = 5$  then  $t_{18} - t_{17} = ?$

A) 5

B) 20

**C) 25**

D) 30

8) Sum of 1<sup>st</sup> five multiple of 3 is —

**A) 45**

B) 55

C) 15

D) 75

9)  $10, 15, 5, \dots$  In this A.P. sum of 1<sup>st</sup> 10 terms is —

**A)  $-75$**

B)  $-125$

C) 75

D) 125

10) In an A.P. 1<sup>st</sup> term is 1 and the last term is 20. the sum of all terms is  $= 399$  then  $n = ?$

A) 42

**B) 38**

C) 21

D) 19

- 11) Sachin invested in a national saving certificate scheme. In the 1st year he invested ₹ 5000, in the second year ₹ 7000, in the third year ₹ 9000 and so on. Find the total amount that he invested in 12 years
- A) ₹ 12900    B) ₹ 12000    C) ₹ 19200    D) ₹ 1920

- 12) First term and common difference of an A.P. are 6 and 3 respectively. Find  $S_{27}$
- A) 1215    B) 1512    C) 1200    D) 1552

- 13) Find the sum of first  $n$  natural numbers
- A)  $\frac{n(n+1)}{2}$     B)  $n(n+1)$     C)  $n^2+n$     D) 1250

- 14) Find  $a_n$  for given A.P. = 3, 8, 13, 18, ...
- A)  $5n-2$     B) 148    C) 152    D)  $2n-5$

- 15) Find the common difference of given AP: 2, 4, 6, 8, ...
- A) 2    B) 4    C) 6    D) 8

16) एक अंकगणितीय श्रेणी के दूसरे पद 13 व 5 वे पद 25 अलग-अलग हए किसे 7 वे पद का है.

- 16) If second term and fifth term of an A.P. are 13 and 25 respectively, find its 7th term
- A) 30    B) 33    C) 37    D) 38

- 17) In an A.P. 0, -4, -8, -12, ... find first term and  $a_2$
- A)  $a=0, d=-8$     B)  $a=4, a_2=-12$   
C)  $a=0, a_2=-4$     D)  $a=0, d=-12$

- 18) If  $a_n = 2n+1$  then find third term of sequence
- A) 3    B) 5    C) 7    D) 9