ASSIGNMENT

Chapter 5 - Arithmetic Progression

Class X

(1 Mark questions)

1. The nth term of an A.P. is 7-4n. Find its common difference.
2. Find the next term of the A.P. -5, -1, ____, _____, _____
3. Which term of A.P. 14, 11, 8..... IS -1?
4. For what value of 'p' is 2p-1, 7 and 3p are three consecutive terms of an A.P.
5. Find the missing term: 10, _____, 30.

(2 Marks questions)

6. The 17th term of an A.P. exceeds its 10th term by 7. Find the common difference.
7. If tn = 3-4n, find S_{20}.
8. If $Sn = 3n^2 + 2n$, find the general term of A.P.
9. Find the A.P. whose tenth term is 52 and whose 17th term exceeds its 13th term by 20.
10. Find the 10th term from the end of A.P. 8, 10,12,..... 126.
11. Find the first –ve term of A.P. 500, 490, 480,.....
12. How many two digits numbers are divisible by 3?

(3 Marks Questions)

13. If m times the mth term of an A.P. is equal to n times its nth term, find its (m+n)th term.
14. The first and the last term of an A.P. are 17 and 350 respectively. If the common difference is 9, how many terms are in A.P. and what is their sum.
15. The sum of first six terms of an A.P. IS 42. The ratio of its 10th term to its 30th term is 1:3. Find the first and the thirteenth term of the A.P.
16. The sum of first p terms of an A.P. 'q' and the sum of first q terms is 'p'. Show that the sum of first (p+q) terms is – (p+q).
17. Find the sum of all three digits numbers which leave the reminder 3 when divided by 5.
18. If the 9th term of an A.P. is zero. Prove that its 29th term is double of its 19th term.
19. The angles of a triangle are in A.P. The greatest angle is twice the least. Find all the angles.
20. Find the common difference of an A.P. whose first term is 1 and the sum of first 4 terms is one-third of the sum of the next four terms.