Std.: 10 (English)   **Maths - I**   **Marks: 20**

Date: **Time: 1 hrs**

Chapter: 3

Q.1   **Choose the carrect alternatives.**   **(3)**

1) From the following AP, find the 15th term

3, 9, 15, 21 ...

a. 81   b. 87   c. 93   d. 99

2) In an A.P. 1st 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

3) In an A.P. if a = 3 and s_8 = 192, then d is

a. 8   b. 7   c. 6   d. 4

Q.2   **Solve the following question. (Any Two)**   **(4)**

1) Find the first term and common difference for each of the A.P.

$\frac{1}{4}, \frac{3}{4}, \frac{5}{4}, \frac{7}{4}, \ldots$

2) Find the sum of 7, 11, 15, 19, ... up to 60 terms.

3) Find the sum of first n odd natural numbers.

Q.3   **Solve the following question. (Any Two)**   **(6)**

1) How many two digit numbers divisible by 4 ?

2) Find how many three digit natural numbers are divisible by 5.

3) Which term of the following A.P. is 560? 2, 11, 20, 29, ...

Q.4   **Solve the following question. (Any One)**   **(4)**

1) Insert five numbers between 4 and 8 so that the resulting sequence is an A.P.

2) Find three consecutive terms in an A.P. whose sum is - 3 and the product of their cubes is 512.

Q.5   **Solve the following question. (Any One)**   **(3)**

1) On 1st Jan 2016, Sanika decides to save Rs. 10, Rs. 11 on second day, Rs. 12 on third day. If she decides to save like this, then on 31st Dec 2016 what would be her total saving?

2) Two A.P.'s are given 9, 7, 5, . . . and 24, 21, 18, ... If nth term of both the progressions are equal then find the value of n and nth term.