STD 10 MATHEMATICS

Topic: Sequence (Ex 2.4 - 2.9)

Total:- 25 marks   **Time:- 45 minutes**

Answer the following questions:-   **4 x 1 = 4**

1. Find nth term of the following sequence 1, 3, 5, 7, ….

2. Find the number of terms in the A.P 3, 6, 9, 12, …. 111.

3. Find the sum to infinity $9 + 3 + 1 + …$

4. Find the sum of $1 + 3 + 5 + …. 55$.

Answer any three of the following questions:-   **3 x 2 = 6**

5. Given $t_n = \dfrac{5n}{n+2}$, find t_6 and t_{13}.

6. If $3 + k$, $18 - k$, $5k + 1$ are in A.P. then find k.

7. Find the average of 100 natural numbers.

Answer any three of the following questions:-   **3 x 5 = 15**

9. The ratio of 6th and 8th term of an A.P. is 7:9. Find the ratio of 9th term to 13th term.

10. Find the sum of all natural numbers between 300 and 600 which are

divisible by 7.

11. In a Geometric progression, the 4th term is $\dfrac{8}{9}$ and the 7th term is $\dfrac{64}{243}$, Find G.P.

12. Rekha has 15 square colour papers of sizes 10 cm, 11 cm, 12 cm,..., 24 cm. How much area can be decorated with these colour papers?

All the Best