TEST PAPER CLASS-X
ARITHMETIC PROGRESSION

1. Determine the AP whose 3^{rd} term is 5 and the 7^{th} term is 9.
2. How many two – digit numbers are divisible by 3?
3. Find the 11^{th} term from the last term [towards the first term] of the AP:10,7,4,.....,-62.
4. In a flower bed, there are 23 rose plants in the first row,21 in the second, 19 in the third, and so on. There are 5 rose plants in the last row. How many rows are there in the flower bed?
5. Find the sum of first 24 terms of the list of numbers whose nth term is given by $a_n = 3 + 2n$
6. A sum of Rs 700 is to be used to give seven cash prizes to students of a school for their overall academic performance. If each prize is Rs 20 less than its preceding prize, find the value of each of the prizes.
7. Find the sum of the first 40 positive integers divisible by 6.
8. A ladder has rungs 25 cm apart. The rungs decrease uniformly in length from 45 cm at the bottom to 25 cm at the top. If the top and the bottom rungs are 2 ½ m apart, what is the length of the wood required for the rungs?
9. A small terrace at a football ground comprises of 15 steps each of which is 50 m long and built of solid concrete. Each step has a rise of ¼ m and a tread of ½ m. Calculate the total volume of concrete required to build the terrace.
10. Determine the AP whose third term is 16 and the 7^{th} term exceeds the 5^{th} term by 12.