

**SUBJECT – MATHEMATICS, CLASS-XI**  
**CHAPTER-COMBINATION**

- 1- In how many ways can a committee be selected from 15 persons if a the committee is to have  
(i) 3 members (ii) 13 members
- 2- There are 10 points in a plane. Of these 10 points 4 points are in a straight line with the exception of these 4 points, no 3 points are in the same straight line. Find the number of straight line formed.
- 3- A persons has 12 friends of them 8 are relatives. In how many ways can be invite 7 friends such that at least 5 of them may be relatives.
- 4- A bag contains 5 black and 6 red balls. Determine the number of ways in which 2 black and 3 red balls can be selected from lots.
- 5- How many four letters word can be formed from the letter of the word “MISSISSIPPI”
- 6- How many ways can we select 6 members committee from 6men and 5 women such that each committee has at least 3 women.
- 7- A committee of 7 has to be formed from 9 boys and 4 girls. In how many ways can this be done when the committee consists of (i) exactly 3 girls? (ii) at least 3 girls?
- 8- A student is allowed to select at most  $n$  books out of  $(2n+1)$  books . if the total no of case in which he can select at least one book is 63. Find  $n$ .
- 9- Let  $T_n$  is the number of all possible triangles formed by joining the vertices of a polygon of  $n$  side. If  $T_{n+1}-T_n =10$  then find  $n$ .
- 10- Given that 5 different green ball,4different blue balls and 3 different red balls how many combination of balls can be chosen taking at least one green and one blue ball