

SUBJECT – MATHEMATICS, CLASS-XI
CHAPTER-COMBINATION

- 1- If $C(n,12) = C(n,8)$ then find n.
- 2- How many chords can be drawn through 15 points on a circle
- 3- How many diagonals are there in a polygon of n sides?
- 4- Find r if $C(8,r) - C(7,3) = C(7,2)$
- 5- A man has 7 friends how many ways he invite 1 or more to his dinner party
- 6- How many ways two books of different language can be selected from 10 Hindi, 5 English and & 7 Sanskrit books?
- 7- How many ways can we select a playing 11 out of 8 bats man and 7 bowlers if each paying 11 contain 5 bowlers
- 8- How many ways we can select 11 cards out of 52 cards
- 9- How many ways we can select 12 black cards out of 52 cards
- 10- How ways we can select 10 cards from 52 card such that each collection contain exactly black king
- 11- The number of ways to painting the faces of a cube with six different colour is
 - a. 1
 - b. 6
 - c. 15
 - d. 30
- 12- For $2 \leq r \leq n$, $C(n, r) + 2x C(n, r-1) + C(n, r-2)$ is
 - a. $C(n+1, r-1)$
 - b. $2x C(n+1, r+1)$
 - c. $2x C(n+2, r)$
 - d. $C(n+2, r)$
- 13- The number of positive integer satisfying the inequality $C(n+1, n-2) - C(n+1, n-1) \leq 100$
 - a. 10
 - b. 9
 - c. 11
 - d. 12
- 14- A polygon has 27 diagonals number of its side is
 - a. 10
 - b. 6
 - c. 9
 - d. 11
- 15- The exponent of 2 in $x = 20 \times 19 \times 18 \times \dots \times 11$ is
 - a. 8
 - b. 10
 - c. 12
 - d. 14