# Tips and Tricks

− Try to solve as much as possible problems, it is a effective solution for gaining confidence in this chapter.

− In permutation and combination it is important to understand basic type problems and then being able to apply them on new problems.

− To be able to master this you should first try to understand basic problems taught in video lectures in depth. Then try to to solve as many problems as possible, with more problems you will get better idea of concepts

− As always try to practice timed tests.

− Also see solving trick of specific type problems.

## Tips and Tricks and Shortcuts for Permutation and Combination

- Use permutations if a problem calls for the number of arrangements of objects and different orders are to be counted.
- Use combinations if a problem calls for the number of ways of selecting objects and the order of selection is not to be counted.
- Summary of formula to use

| Order | Repetition | Formula |
|---|---|---|
| Permutation | Yes | $n^r$ |
| Permutation | No | $np_r$ |
| Combination | Yes | $r+n-1_{Cr}$ |
| Combination | No | $n_{Cr}$ |