Tips and Tricks and Shortcuts for Permutation and Combination:

- 1. While practicing, try to solve the questions in more than one way and see which method takes less time. This will help you to find the best way to solve the question.
- 2. You need to do a sufficient amount of practice before the test, to master the subject.
- 3. Most of the Permutation and Combination problems are based on real life examples so try to visualize them as it gives a clear idea what the question is really asking you to do.
- 4. Permutation is used if a problem calls for the number of arrangements of objects and different orders are to be counted.
- 5. Combination is used if a problem calls for the number of ways of selecting objects and the order of selection is not to be counted.
- 6. Formula for permutations is: nPr =  $\frac{n!}{(n-r)!}$
- 7. Formula for combinations is:  $nCr = \frac{n!}{r! (n-r)!}$