Probability Theory 1 – An Outline

Here we shall try to understand what we mean by the probability (chance) of an event and how to measure it. We shall consider three approaches – classical, frequency and axiomatic.

As a path to measure probability we shall consider some aspects of combinatorial analysis.

We shall further consider different laws of probability and the theorems connecting them.

Pre-Requisites for this course:

- Elementary Arithmetic and Algebra.
- Arithmetic and Geometric Progressions.
- Infinite series like exponential series, logarithmic series, binomial series with negative index, etc.
- Permutation and Combination.

Outcome of the Course

- Knowledge of different approaches to probability and their inter-relations.
- Elementary Combinatorial Analysis.
- Different results related to probability theory and their applications.

References:

1. S.M. Ross : A First Course in Probability.