Preface

This compilation of lecture notes is an introduction to the course 'Topics in Applied Stochastic Processes and Topics in Discrete Probability' offered at ISI Bangalore for BMath and MMath students. It is based on the assumption that the reader has a basic pre-requisite of Probability Theory, and an exposure to Measure Theoretic Probability is desired but not mandatory.

The primary aim of this course is to explore and discuss a number of topics from modern probability theory that are centred around random walks. The lecture notes will provide students with the essential knowledge and understanding of the topics, as well as a platform to apply the same practically.

We hope that this compilation of lecture notes will be a useful resource to the students, and serve as a valuable reference material in the future. The main references of this course is [**?**, **?**].