Discrete Mathematics

V Sai Prabhav

ISI Year II, Semester I

Chapter 1

Logic and Proofs

1.1 Propositional Logic

1.2 Predicate Logic

1.3 Methods of Proof

Chapter 2

Set Theory

2.1 Sets and Set Operations

2.2 Functions

2.3 Relations

Chapter 3

Combinatorics

3.1 Counting Principles

3.2 The Pigeonhole Principle

3.3 Recurrence Relations

Chapter 4

Graph Theory

4.1 Graphs and Graph Models

4.2 Euler and Hamilton Paths

4.3 Trees