

**MAT315 Combinatorial Enumeration**  
**Monsoon 2024**

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## Contents

Preface	vii
Chapter 1. What is Combinatorics?	1
Chapter 2. The Art of Bijections	3
Chapter 3. Generating Functions	5
Chapter 4. Integer Partitions	7
Chapter 5. Lattice Path Combinatorics	9
Chapter 6. A Combinatorial Miscellany	11
Bibliography	13



## Preface

These are the lecture notes of MAT315 Combinatorial Enumeration, offered in Monsoon 2024 semester at Ahmedabad University, India. The notes were written down by the TA for the course, Kanak Dhotre and is as close to the classroom teaching as possible.

If there are any errors, comments, or corrections, please write to me via email.

Manjil Saikia



## CHAPTER 1

### What is Combinatorics?

- (1) This is a non-local test commit made by Kanak via GitHub on 30th July 2:03pm.
- (2) This is a local test commit made by Kanak via GitHub on 30th July 2:15pm.
- (3) This is a local test commit made by Kanak via Github on 30th July 2:16pm to check if the .vimrc is working.  $2 + 2 = 4$





## CHAPTER 2

# The Art of Bijections



## CHAPTER 3

# Generating Functions



## CHAPTER 4

# Integer Partitions



CHAPTER 5

**Lattice Path Combinatorics**





## CHAPTER 6

### **A Combinatorial Miscellany**



## Bibliography

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