



MA318 Jan 3:0

Combinatorics

Instructor

Arvind Ayyer

Email: arvind@iisc.ac.in

Teaching Assistant

Email:

Department: Mathematics

Course Time:

Lecture venue:

Detailed Course Page:

Announcements

Brief description of the course

Elective. An introduction to modern combinatorics. Open to all.

Prerequisites

None

Syllabus

Counting problems in sets, multisets, permutations, partitions, trees, tableaux;

ordinary and exponential generating functions;

posets and principle of inclusion-exclusion, the transfer matrix method;

the exponential formula, Polya theory;

bijections, combinatorial identities and the WZ method.

Course outcomes

How to approach problems in combinatorics

Grading policy

5% “ Attendance

15% “ Quizzes and Homeworks

30% â€“ Midterm

50% â€“ Final

Assignments

Resources