

IITBMO2025 Syllabus

Syllabus for Level I

1. Arithmetic

Basic arithmetic, ratio and proportion, time and distance, time and work

2. Algebra

Basic algebra, polynomials and equations, inequalities, surds, indices

3. Geometry

Basic geometry, mensuration, polygons, trigonometry

4. Number Theory

Divisibility, counting, progressions and patterns, mathematical induction

5. Miscellaneous

Permutations and combinations, basic probability

Syllabus for Level II

1. Arithmetic

Basic arithmetic, ratio and proportion, time and distance, time and work

2. Algebra

Basic algebra, polynomials and equations, inequalities, logarithm, surds, indices, complex numbers, matrices, determinants

3. Geometry

Basic geometry, mensuration, polygons, trigonometry, 2-dimensional and 3-dimensional coordinate geometry, conic sections

4. Number Theory

Divisibility, counting, progressions and patterns, mathematical induction

5. Calculus

Functions, limits, continuity, differentiability, differentiation, integration, applications of calculus to optimization problems

6. Miscellaneous

Permutations and combinations, basic probability, linear programming problems (LPP)