



CBSE · CLASS 11

Mathematics

Higher secondary foundation covering Sets, Relations & Functions, Complex Numbers, Permutations & Combinations, Binomial Theorem, Sequences, Straight Lines, Conic Sections, Limits & Derivatives, and Statistics.

Board: Central Board of Secondary Education

Theory: 80 Marks

Internal/Practical: 20 Marks

Exam Duration: 3 Hours

UNIT-WISE SYLLABUS & MARKS BREAKDOWN

UNIT	CHAPTERS & PRESCRIBED TOPICS	MARKS
Unit I	Sets and Functions Sets (Representation, empty, finite, infinite, subsets, power set, Venn diagrams, union & intersection); Relations & Functions (Ordered pairs, Cartesian product, domain, co-domain, range, function graphs); Trigonometric Functions (Radian measure, signs of trigonometric functions, sum and difference formulas)	23
Unit II	Algebra Complex Numbers and Quadratic Equations (Algebraic properties, Argand plane); Linear Inequalities (Algebraic solutions in one variable and representation on number line); Permutations and Combinations (Fundamental principle of counting, nPr , nCr , simple applications); Binomial Theorem (Statement and expansion for positive integral indices); Sequence and Series (Arithmetic Progression, Geometric Progression, infinite GP sum)	25
Unit III	Coordinate Geometry Straight Lines (Slope, angle between lines, forms of equations: slope-intercept, two-point, intercept form, distance of a point from a line); Conic Sections (Circles, Parabola, Ellipse, Hyperbola standard equations); Introduction to 3D Geometry (Coordinate axes and planes, coordinates of a point, distance formula)	12
Unit IV	Calculus Limits and Derivatives (Intuitive idea of limit, limits of trigonometric functions, derivative as rate of change, product and quotient rule)	08
Unit V	Statistics and Probability Statistics (Measures of Dispersion: Range, Mean Deviation, Variance and Standard Deviation of ungrouped/grouped data); Probability (Events, mutually exclusive, independent events, axiomatic probability)	12

INTERNAL / PRACTICAL ASSESSMENT SCHEME (20 MARKS)

EVALUATION COMPONENT	MARKS WEIGHTAGE
Periodic Written Tests Term assessments conducted in school	10 Marks

EVALUATION COMPONENT	MARKS WEIGHTAGE
Maths Activity File & Viva NCERT laboratory activities and oral examination	10 Marks

RECOMMENDED REFERENCE LITERATURE

Prescribed Textbooks: NCERT Mathematics Class 11, RD Sharma, Excellence Analytical Problem Sets

The Excellence Tuition Edge

Every unit in this curriculum is taught with structured conceptual lectures, followed by weekly speed-testing, detailed mistake analysis, and dedicated 1:1 doubt-clearing sessions to build board exam confidence.

Excellence Tuition Centres: Sarsuna (Opp. High School) · Joka · Chatterjee Para (Behala)

Admissions & Inquiries: +91 89022 70803 · excellence-tuition.vercel.app