

**ICSE · CLASS 9**

Mathematics

First year of the two-year ICSE secondary course covering pure arithmetic, commercial math (compound interest without and with formula), algebra, geometry theorems, mensuration, and trigonometry.

Board: Council for the Indian School Certificate Examinations**Theory:** 80 Marks**Internal/Practical:** 20 Marks**Exam Duration:** 2½ Hours

UNIT-WISE SYLLABUS & MARKS BREAKDOWN

UNIT	CHAPTERS & PRESCRIBED TOPICS	MARKS
Unit 1	Pure Arithmetic Rational and Irrational Numbers: Rational numbers as recurring or terminating decimals, irrational numbers as non-recurring and non-terminating decimals, real numbers, surds and rationalisation	06
Unit 2	Commercial Mathematics Compound Interest: Compound interest as a repeated simple interest computation with a growing principal; use of formula $A = P(1 + r/100)^n$, interest compounded yearly or half-yearly	08
Unit 3	Algebra Expansions: Recall of identities, expansions of $(a \pm b)^2$, $(a \pm b)^3$, $(a + b + c)^2$; Factorisation: Taking out common factors, grouping, difference of two squares, trinomials $ax^2 + bx + c$; Simultaneous Linear Equations in two variables; Quadratic Equations: Solution by factorisation; Logarithms: Meaning, laws of logarithms	24
Unit 4	Geometry Triangles: Congruency of triangles (SAS, ASA, SSS, RHS), Isosceles triangle theorems, Inequalities in a triangle; Mid-point Theorem and its converse; Pythagoras Theorem; Rectilinear Figures (Parallelograms, Rectangles, Rhombus, Squares properties and proofs); Area Theorems; Circles: Chords and arcs properties	20
Unit 5	Statistics Introduction, collection and tabulation of data, frequency distribution, tally marks, mean and median of ungrouped data	06
Unit 6	Mensuration Area and perimeter of triangle, quadrilateral and circle; Circumference and area of a circle, semi-circle, ring	08
Unit 7	Trigonometry Trigonometric ratios: sin, cos, tan, cot, sec, cosec of an acute angle of a right-angled triangle; Simple standard angles (0° , 30° , 45° , 60° , 90°); Trigonometric ratios of complementary angles	08

INTERNAL / PRACTICAL ASSESSMENT SCHEME (20 MARKS)

EVALUATION COMPONENT	MARKS WEIGHTAGE
Two Internal Projects Mathematical model / survey / graphical analysis evaluated internally and by visiting examiner	20 Marks

RECOMMENDED REFERENCE LITERATURE

Prescribed Textbooks: Concise Mathematics Class 9 (Selina), Understanding ICSE Mathematics Class IX (ML Aggarwal), Excellence ICSE Practice Manual

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