

Locus Learning Scholarship Test: Structure & Test Syllabus

This document outlines the official exam pattern and syllabus for the Locus Learning Scholarship Test. Because the exam is held prior to the start of the new academic year, the syllabus specifically evaluates core academic foundations based on the curriculum the student has *just completed*.



Exam Pattern & Marking Scheme

General Test Details

- **Test Duration:** 90 Minutes (1.5 Hours)
- **Total Questions:** 60 Multiple Choice Questions (MCQs)
- **Maximum Marks:** 240 Marks
- **Question Format:** Each question will have 4 options with only 1 correct answer.

Subject-wise Question Breakdown (Common for all grades)

- **Mathematics:** 20 Questions
- **Science (Physics, Chemistry, Biology):** 20 Questions
- **Mental Ability & Logical Reasoning:** 20 Questions

Marking Scheme

To gently introduce students to the realities of competitive exams (like JEE and NEET) while keeping it encouraging for younger learners, we utilize a tiered marking system:

- **For Admission to Classes 6 & 7 (Middle School Foundation):**
 - Correct Answer: **+4 Marks**
 - Incorrect Answer: **No Negative Marking** (0 Marks)
 - Unattempted Question: **0 Marks**
- **For Admission to Classes 8, 9 & 10 (Secondary & Competitive Foundation):**
 - Correct Answer: **+4 Marks**
 - Incorrect Answer: **-1 Mark** (*Negative marking is introduced to build accuracy, decision-making, and competitive temperament*)
 - Unattempted Question: **0 Marks**

Grade-by-Grade Official Syllabus

Admission to Class 6 (Testing Class 5 Concepts)

Mathematics

- **Numbers & Operations:** Large Numbers (up to Crores), Indian and International systems, Addition, Subtraction, Multiplication, and Division algorithms.
- **Fractions & Decimals:** Types of fractions, basic operations with fractions, introduction to tenths and hundredths.
- **Factors & Multiples:** HCF, LCM, Prime and Composite numbers.
- **Basic Geometry:** Angles (measurement and types), properties of basic shapes (squares, rectangles, triangles).
- **Measurement & Mensuration:** Conversion of units (length, weight, volume), Perimeter and Area of squares and rectangles.
- **Data Handling:** Reading and interpreting basic pictographs and bar graphs.

Science (Environmental Studies Base)

- **The Human Body & Health:** The digestive system, sensory organs, diseases, and basic nutrition.
- **Plant & Animal Life:** Seed germination, plant reproduction, animal habitats, and food chains.
- **Natural Resources & Environment:** Properties of water (sinking, floating, dissolving), states of matter, basic fossil fuels, and water conservation.
- **Earth & Space:** Basic introduction to the solar system, earth's rotation, and gravitation.

Mental Ability & Logical Reasoning

- Number and Alphabet Patterns
- Coding and Decoding
- Spotting the Odd One Out
- Mirror Images (Basic)

Admission to Class 7 (Testing Class 6 Concepts)

Mathematics

- **Number System:** Knowing Our Numbers, Whole Numbers, Integers.
- **Fractions & Decimals:** Operations and word problems.
- **Basic Algebra:** Introduction to variables and forming simple expressions.
- **Geometry:** Basic Geometrical Ideas (Lines, Angles, Polygons), Understanding Elementary Shapes.
- **Mensuration:** Perimeter and Area of Rectangles and Squares.
- **Commercial Math:** Concept of Ratio and Proportion.

Science

- **Physics:** Motion and Measurement of Distances, Light, Shadows and Reflections, Electricity and Circuits, Fun with Magnets.
- **Chemistry:** Sorting Materials into Groups, Separation of Substances, Changes Around Us (Reversible/Irreversible).
- **Biology:** Food components and sources, Getting to Know Plants (parts and functions), Body Movements (joints and bones), The Living Organisms and Their Surroundings.

Mental Ability & Logical Reasoning

- Number and Alphabet Series
- Direction Sense Test
- Water and Mirror Images
- Blood Relations (Basic)

Admission to Class 8 (Testing Class 7 Concepts)

Mathematics

- **Number System:** Integers, Rational Numbers, Decimals.
- **Algebra:** Simple Equations, Algebraic Expressions.
- **Geometry:** Lines and Angles, The Triangle and its Properties, Congruence of Triangles.
- **Mensuration:** Perimeter and Area (Triangles, Parallelograms, Circles).
- **Commercial Math:** Comparing Quantities (Percentages, Profit & Loss, Simple Interest).
- **Exponents:** Laws of Exponents and Powers.

Science

- **Physics:** Motion and Time, Heat (transfer and measurement), Electric Current and its Effects, Light (Reflection).
- **Chemistry:** Acids, Bases and Salts, Physical and Chemical Changes.
- **Biology:** Nutrition in Plants and Animals, Respiration in Organisms, Transportation in Animals and Plants, Reproduction in Plants.

Mental Ability & Logical Reasoning

- Complex Blood Relations
- Venn Diagrams
- Embedded Figures
- Mathematical Operations & Sign Substitution

Admission to Class 9 (Testing Class 8 Concepts)

Mathematics

- **Number System:** Rational Numbers, Squares/Square Roots, Cubes/Cube Roots.
- **Algebra:** Linear Equations in One Variable, Algebraic Expressions and Identities, Factorisation.
- **Geometry:** Understanding Quadrilaterals, Practical Geometry.
- **Mensuration:** Area of Polygons, Surface Area and Volume of Cubes, Cuboids, and Cylinders.
- **Commercial Math:** Comparing Quantities (Compound Interest, Discount).
- **Proportions:** Direct and Inverse Proportions.

Science

- **Physics:** Force and Pressure, Friction, Sound, Chemical Effects of Electric Current, Some Natural Phenomena (Lightning, Earthquakes), Light.
- **Chemistry:** Synthetic Fibres and Plastics, Materials: Metals and Non-Metals, Coal and Petroleum, Combustion and Flame.
- **Biology:** Crop Production and Management, Microorganisms, Conservation of Plants and Animals, Cell: Structure and Functions, Reproduction in Animals, Reaching the Age of Adolescence.

Mental Ability & Logical Reasoning

- Syllogisms
- Cubes and Dice
- Analytical Reasoning
- Figure Matrix and Pattern Completion

Admission to Class 10 (Testing Class 9 Concepts)

Mathematics

- **Number Systems:** Real Numbers, Laws of Exponents for Real Numbers.
- **Algebra:** Polynomials (Factor and Remainder Theorems), Linear Equations in Two Variables.
- **Coordinate Geometry:** Cartesian System.
- **Geometry:** Lines and Angles, Triangles (Congruence rules), Quadrilaterals, Circles.
- **Mensuration:** Heron's Formula, Surface Areas and Volumes (Spheres, Cones, Cylinders).
- **Statistics & Probability:** Measure of Central Tendency (Mean, Median, Mode), Empirical Probability.

Science

- **Physics:** Motion, Force and Laws of Motion, Gravitation, Work and Energy, Sound.
- **Chemistry:** Matter in Our Surroundings, Is Matter Around Us Pure, Atoms and Molecules, Structure of the Atom.
- **Biology:** The Fundamental Unit of Life (Cell), Tissues, Diversity in Living Organisms (Basics), Why Do We Fall Ill, Natural Resources.

Mental Ability & Logical Reasoning

- Advanced Series and Missing Characters
- Seating Arrangement and Complex Puzzles
- Data Sufficiency
- Logical Deduction and Statement Analysis

All the Best!!