# SRF OLYMPIAD (SRMO) SYLLABUS

#### **GRADE - I**

Patterns, Odd One Out, Measuring Units, Geometrical Shapes, Spatial Understanding, Grouping of Figures, Problems based on Figures. Numerals, Number Names (1-50), Addition, Subtraction, Lengths, Weights and Comparisons, Time, Money, Geometrical Shapes.

#### **GRADE - II**

Patterns, Odd One Out, Measuring Units, Geometrical Shapes, Analogy, Ranking Test, Grouping of , Coding-Decoding.Numerals, Number Names, Number Sense (3-digit numbers), Length, Weight, Capacity, Time, Temperature, Money, Lines, Shapes , Patterns, Addition, Subtraction, Multiplication.

#### **GRADE - III**

Patterns, Analogy and Classification, Alphabet Test, Coding-Decoding, Geometrical Shapes, Possible Combinations, Clock and Calendar. Numerals, Number Names, Number Sense (4-digit numbers), Fractions, Length, Weight, Capacity, Temperature, Time, Money, Geometry, Addition, Subtraction, Multiplication.

#### **GRADE - IV**

Patterns, Alphabet Test, Coding-Decoding, Ranking Test, Geometrical Shapes and Solids, Direction Sense Test, Possible Combinations, Analogy and Classification, Clock and Calendar. Numerals, Number Names, Number Sense (more than 4-digit numbers), Computation Operations, Fractions, Length, Weight, Capacity, Time, Money, Geometry, Perimeter of Various Shapes, Symmetry, Conversions.

## **GRADE - V**

Patterns, Analogy, Classification, Geometrical Shapes, Mirror and Water Images, Direction Sense Test, Ranking Test, Alphabet Test, Logical Sequence of Words, Puzzle Test, Coding-Decoding, Clock and Calendar. Numerals, Number Names (7 and 8 digit numbers), Computation Operations, Fractions and Decimals, Measurement of Length, Weight, Capacity, Time, Temperature and Money, Conversions, Angles, Perimeter of Various Shapes & Area of Rectangle and Square, Symmetry.

### CLASS - VI

Patterns in Mathematics, Lines and Angles, Number Play, Data Handling and Presentation, Prime Time, Perimeter and Area, Fractions, Playing with Constructions, Symmetry, The Other Side of Zero.HCF, LCM, Knowing our numbers, whole numbers, decimals, shapes, integers, angles, parallel lines, linear pair, analogy, coding, decoding.

### CLASS - VII

Integers, Fractions and Decimals, Exponents and Powers, Algebraic Expressions, Simple Equations, Lines and Angles, Comparing Quantities, The Triangle and its Properties, Symmetry, Rational Numbers, Perimeter and Area, Data Handling, Visualising Solid Shapes, analogy, coding, decoding, direction sence test, higher order thinking questions, reasoning

# **CLASS - VIII**

Rational Numbers, Squares and Square Roots, Cubes and Cube Roots, Exponents and Powers, Comparing Quantities, Algebraic Expressions, Linear Equations in One Variable, Understanding Quadrilaterals, Mensuration, Data Handling, Direct and Inverse Proportions, Factorisation, Introduction to Graphs. analogy, coding, decoding, higher order thinking questions, reasoning.

### CLASS - IX

Number Systems, Polynomials, Coordinate Geometry, Linear Equations in Two Variables, Introduction to Euclid's Geometry, Lines and Angles, Triangles, Quadrilaterals, Circles, Heron's Formula, Surface Areas and Volumes, Statistics. analogy, coding, decoding, higher order thinking questions, reasoning.

# CLASS - X

Real Numbers, Polynomials, Pair of Linear Equations in Two Variables, Quadratic Equations, Arithmetic Progressions, Triangles, Coordinate Geometry, Introduction to Trigonometry, Some Applications of Trigonometry, Circles, Areas Related to Circles, Surface Areas and Volumes, Statistics, Probability. analogy, coding, decoding, higher order thinking questions, reasoning.