



# ISFO SYLLABUS

## **Maths**

(Grade - 1 to 10)



Empowering children to become

Global Olympiad Champions

#### **Maths**

#### Grade -1

#### Section 1: Mathematical Reasoning

and

#### Section 2: Everyday Math

• Numbers 1 to 1000, Addition and Subtraction, Multiplication and Division, Length, Mass and Volume, Money, Time, Shapes and Patterns

#### Section 3: Logical Reasoning

 Verbal and Non- verbal reasoning. This section includes topics like- blood relation, codingdecoding, direction sense test, number series, alphabet series, problem solving based on pictures, diagrams and shapes, classification (odd one out), images, matrix, spotting out the embedded figure, clock and calendar.

#### Section 4: Brainbox

Higher Order Thinking Questions - from Sections 1 & 2

#### Grade -2

#### Section 1: Mathematical Reasoning

and

#### Section 2: Everyday Math

 Numbers to 1000, Addition and Subtraction upto 1000, Multiplication and Division, Length, Mass, Money, Fractions, Time, Volume, Graphs, Lines and Surfaces, Shapes and Patterns

#### Section 3: Logical Reasoning

 Verbal and Non- verbal reasoning. This section includes topics like- blood relation, codingdecoding, direction sense test, number series, alphabet series, problem solving based on pictures, diagrams and shapes, classification (odd one out), images, matrix, spotting out the embedded figure, clock and calendar.

#### Section 4: Brainbox

Higher Order Thinking Questions - from Sections 1 & 2

#### Grade 3

#### Section 1: Mathematical Reasoning

and

#### Section 2: Everyday Math

 Numbers 1 to 10000 Additions and Subtraction within 10000, Addition and Subtraction within 10000, Multiplication and Division, Money, Length, Mass, Volume, Bar Graph, Time, Geometry, Area and Perimeter

#### Section 3: Logical Reasoning

 Verbal and Non- verbal reasoning. This section includes topics like- blood relation, codingdecoding, direction sense test, number series, alphabet series, problem solving based on pictures, diagrams and shapes, classification (odd one out), images, matrix, spotting out the embedded figure, clock and calendar.

#### Section 4: Brainbox

Higher Order Thinking Questions - from Sections 1 & 2

#### Grade 4

#### Section 1: Mathematical Reasoning

and

#### Section 2: Everyday Math

Numbers, Decimals, Fractions, Time, Geometry, Area and Perimeter, Tables and Line graphs,
 Symmetry and Tessellations

#### Section 3: Logical Reasoning

 Verbal and Non- verbal reasoning. This section includes topics like- blood relation, codingdecoding, direction sense test, number series, alphabet series, problem solving based on pictures, diagrams and shapes, classification (odd one out), images, matrix, spotting out the embedded figure, clock and calendar.

#### Section 4: Brainbox

Higher Order Thinking Questions - from Sections 1 & 2

#### Grade 5

#### Section 1: Mathematical Reasoning

and

#### Section 2: Everyday Math

• Numbers, Fractions, Decimals, Ratio, Average, Percentage, Geometry, Area and Volume

#### Section 3: Logical Reasoning

 Verbal and Non- verbal reasoning. This section includes topics like- blood relation, codingdecoding, direction sense test, number series, alphabet series, problem solving based on pictures, diagrams and shapes, classification (odd one out), images, matrix, spotting out the embedded figure, clock and calendar.

#### Section 4: Brainbox

Higher Order Thinking Questions - from Sections 1 & 2

#### Grade 6

#### Section 1: Mathematical Reasoning

and

#### Section 2: Everyday Math

 Whole Numbers, Fractions, Ratio and Proportion, Percentage, Speed and Time, Algebra, Lines and Angles, Area and Perimeter, Graphs and Pie chart

#### Section 3: Logical Reasoning

 Verbal and Non- verbal reasoning. This section includes topics like- blood relation, codingdecoding, direction sense test, number series, alphabet series, problem solving based on pictures, diagrams and shapes, classification (odd one out), images, matrix, spotting out the embedded figure, clock and calendar.

#### Section 4: Brainbox

Higher Order Thinking Questions - from Sections 1 & 2

#### Grade 7

#### Section 1: Mathematical Reasoning

and

#### Section 2: Everyday Math

• Integers and Rational Numbers, Fractions and Decimals, Ratio and Proportion and Comparing Quantities, Algebraic Expression and Equations, Geometry, Perimeter and Area, and Data Handling

#### Section 3: Logical Reasoning

 Verbal and Non-verbal reasoning. This section includes topics like- blood relation, codingdecoding, direction sense test, number series, alphabet series, problem solving based on pictures, diagrams and shapes, classification (odd one out), images, matrix, spotting out the embedded figure, clock and calendar.

#### Section 4: Brainbox

Higher Order Thinking Questions - from Sections 1 & 2

#### Grade 8

#### Section 1: Mathematical Reasoning

and

#### Section 2: Everyday Math

Rational Numbers, Squares and Square Roots, Cubes and Cube Roots, Exponents and Powers,
 Comparing Quantities, Direct and Inverse Proportions, Linear Equations in One Variable, Algebraic Expressions & Identities, Factorisation, Mensuration and Data Handling (Probability)

#### Section 3: Logical Reasoning

 Verbal and Non- verbal reasoning. This section includes topics like- blood relation, codingdecoding, direction sense test, number series, alphabet series, problem solving based on pictures, diagrams and shapes, classification (odd one out), images, matrix, spotting out the embedded figure, clock and calendar.

#### Section 4: Brainbox

Higher Order Thinking Questions - from Sections 1 & 2

#### Grade 9

#### Section 1: Mathematical Reasoning

and

#### Section 2: Everyday Math

 Number Systems, Polynomials, Linear Equations in Two Variables, Euclid's Division Lemma, Lines and Angles, Triangles, Quadrilaterals, Areas of Parallelograms and Triangles, Surface Area and Volume, Hero's Formula, Circles, Coordinate Geometry, Probability

#### Section 3: Logical Reasoning

 Verbal and Non- verbal reasoning. This section includes topics like- blood relation, codingdecoding, direction sense test, number series, alphabet series, problem solving based on pictures, diagrams and shapes, classification (odd one out), images, matrix, spotting out the embedded figure, clock and calendar.

#### Section 4: Brainbox

Higher Order Thinking Questions - from Sections 1 & 2

#### Grade 10

### Section 1: Mathematical Reasoning and

#### Section 2: Everyday Math

 Polynomials, Quadratic Equations, Arithmetic Progressions, Coordinate Geometry, Introduction to Trigonometry, Trigonometric Identities and Some Applications of Trigonometry, Circles, Areas Related to Circles, Surface Area and Volume, Statistics and Probability

#### Section 3: Logical Reasoning

 Verbal and Non-verbal reasoning. This section includes topics like- blood relation, codingdecoding, direction sense test, number series, alphabet series, problem solving based on pictures, diagrams and shapes, classification (odd one out), images, matrix, spotting out the embedded figure, clock and calendar.

#### Section 4: Brainbox

Higher Order Thinking Questions - from Sections 1 & 2

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