

## **SYLLABUS (INTERNATIONAL MATH WIZARD OLYMPIAD (IMWO))**

### **Class-I**

- Number Sense, Back and Forth counting, Addition up to 10, Subtraction 1 to 10, More Addition and subtraction, Number up to 50, Shapes and Pattern, Measurement, Time, Money, Data handling, I.Q.

### **Class-II**

- Number and numeration, Addition of 2 digit numbers, Subtraction, Multiplication, Division, Basic, Measurement, Time, Money, Measurement, Data Handling, I.Q.

### **Class-III**

- Numbers and Numeration, Addition, Subtraction, Division, Fraction, Money, Geometry, Measurement, Time, Patterns, Data Handling, I.Q.

### **Class-IV**

- Large Number, Addition and subtraction, Roman numbers, Multiplication and Division, Factors and multiples, Fraction, Decimals form, Money, Time, Measurement, Geometry, Perimeter and Area, Data Handling, I.Q.

### **Class-V**

- Number and numeration, Roman numbers, Operation involving large numbers, Simple fraction, H.C.F. and L.C.M., Unitary method, Profit and loss, Percentages, Speed distance and time, Geometry, Perimeter, Area and Volume, Data Handling, Time and Temperature, I.Q.

### **Class-VI**

- Knowing our Numbers, Whole numbers, Playing with Numbers, Geometric concepts, Integers, Fraction, Decimals, Algebra, Ratio proportion and Unitary method, Mensuration, Symmetry, Construction, Data Handling, I.Q.

### **Class-VII**

- Knowing our Number, Fraction, Decimals, Rational Numbers, Exponents and Powers, Algebraic expression, Linear equation in one variable, Percentage and its application, Lines and Angles, Properties of Triangles, Congruence of Triangle, Construction, Perimeter and Area, Data Handling, I.Q.

### **Class-VIII**

- Rational Numbers, Exponents and Powers, Playing with the number, Algebraic expressions and unique products, Fraction, Linear equation, Percentage and its application, Variation and direct and inverse proportions, Time and work, Quadrilaterals, Construction, Area of a Trapezium and a Polygon, Volume and Surface Area of Solids, Data Handling, Graphs, Probability, I.Q.

### **Class-IX**

- Number system, Algebra, Introduction to Euclid's Geometry, Co-ordinate geometry, Lines and Angles, Triangles, Heron's formula, Lines equations in two variable, Quadrilaterals, Area of parallelogram and triangles, Circles, Constructions, Surface area and Volumes, Statistics, Probability, I.Q. Test.

### **Class-X**

- Number system, Poly nominal, Pair of lines equations in two variables, Quadratic equations, Arithmetic progressions, Similar triangles, Co-ordinate geometry, Trigonometry, Application of trigonometry, Circle, Construction, Area related to circles, Surface area and Volume, Probability, Statistics, I.Q. Test.

### **Class-XI**

- Sets, Relations and Functions, Coordinate Geometric, Straight line, Pair of Straight line, Conic section, Basic concept about three dimension-(Solid geometry), Sequence and series, Complex Number. Quadratic Equation and expression, Binomial Theorem, Permutation and Combination, Probability, Non-Verbal Reasoning (I.Q.), Central Tendency, Variance & Standard Deviation

### **Class-XII**

- Relations & functions, Binary operation, Matrix and Determinants, Continuity & Differentiability, Differentiation, Application of derivatives, Inverse trigonometric function, Indefinite & definite Integration; Application of Integral, Differential Equation, Coordinate Geometry, Solid Geometry-(St. line, Plane, Sphere), Probability, Permutation & Combination, Central Tendency, Variance & Standard Deviation; Random Variable & its distribution, Non- Verbal Reasoning (I. Q. Test)

### **Things to remember**

- 1st level of the Olympiad will be conducted for all the registered participants in their respective schools on the scheduled dates for a particular subject.
- 2nd level examination will be conducted in February among 600 toppers of 1st level from all the subjects to select the top-ranking participants of the Olympiads. The venue will be again the school itself.
- 3rd level examination will be conducted between number 1st Olympiad rank holders of 3rd to 12th only from all the subjects in Delhi to select the top three winners.