

## **ANNEXURE-2**

### **SYLLABUS FOR ONLINE SCHOOL LEVEL (LEVEL-I) EXAMINATION JUNIOR GROUP (CLASS - VI, VII & VIII)**

#### **A. PHYSICS**

- Motion and Measurement of Distances, Measurement, Measurement of Length
- Light, Shadows and Reflections, Propagation of Light, Transparent, Translucent and Opaque Objects
- Electricity and Circuits. Electric Cell. Electric Bulb
- Fun with Magnets. Magnetic and Non-Magnetic Materials. Natural and Man-Made Magnets.
- Heat
- Temperature
- Transfer of heat
- Motion and time
- Types of motion
- Distance and displacement, speed and velocity
- Measurement of time and speed
- Electric current and its effects
- Symbols of electric components
- Heating effects of electric current
- Magnetic effect of electric current
- Light
- Rectilinear propagation of light
- Reflection of light
- Plane and spherical mirrors
- Sunlight
- Newton's disc
- Winds, storms and cyclones
- Chemical Effect of Electric Current, Chemical Effect of Electric Current and Its Applications
- Force and Pressure, Force and its effects
- Friction, Friction and its effects
- Light, Reflection of Light
- Some Natural Phenomena, Lightning and Earthquake
- Sound, Human Ear
- Stars and the Solar System

#### **B. CHEMISTRY**

- Sorting of materials into groups
- Separation of substances
- Changes around us
- Water
- Air around us
- Fibre to fabric
- Acids, bases, salts

- Heat
- Physical and chemical changes
- Soil
- Water
- Waste water story
- Coal and petroleum
- Combustion and flame
- Pollution of air and water
- Synthetic fibre and plastic
- Materials - Metals and non-metals
- Definition of elements, compounds and mixture
- Names and Symbols of elements from atomic number 1-30
- Types of elements- metals, non-metals and metalloids

### **C. BIOLOGY**

- Food components, balanced diet and deficiencies
- Plant types and parts of a plant
- Body joints and types of movements
- Characteristics of living organisms
- Nutrition in plants
- Nutrition in animals
- Respiration
- Transportations
- Reproduction in plants
- Forests
- Waste water
- Crop production and management
- microorganisms
- Conservation of animal and plants
- Animal reproduction
- Adolescence
- Ear structure

### **D. MATHEMATICS**

- **Arithmetic** - Fractions, Percentage, Profit & Loss, LCM & HCF, Square, Cube, Square Root & Cube Root, Time, Work & Distance, Rational Number, Integers, Simple & Compound Interest
- **Algebra** - Simple Equation, Factorization, Algebraic Identities
- **Geometry** - Lines & Angles, Triangles, Polygon & Quadrilaterals, Circles
- **Mensuration** - Perimeter & Area of 2-Dimensions, Volume & Surface Area of Cube & Cuboid
- **Statistics** - Data Analysis, Mean, Median and Mode of discrete data, Graphical representation – Histogram, Bar Graph, Pie Chart, Frequency Polygon.

### **E. Logic & Reasoning –**

Crypt arithmetic (Alphametics), Logical Sequence Series, Coding & decoding, Blood Relations, Input & Output, Binary Logic, Standard LR Sets, Cubes and Visual Puzzles, Word Problems, IQ

puzzles, Sequencing, Grid Puzzles, Linear and Circular Seating Arrangements. Visual Puzzles, Cubes and Dices, Venn Diagrams, Math based reasoning, Direction, Order and Ranking, Clocks & Calendar, Analogy, Syllogism, Analytical puzzles, Inequalities, Image based sequence. Critical path, Decision making, Mirror image & water image, Odd one out, shape constructions, Paper folding, Figure matrix