# **Screening cum Scholarship Test**



# **SYLLABUS**

#### Mathematics

- ♦ Set Theory, Relations
- Quadratic Equations
- ♦ Logarithms
- Sequence and Series
- ♦ Trigonometric Ratios and Identities
- ♦ Complex Number
- ♦ Straight line

# **Physics**

- ♦ Units and Dimensions
- Vectors
- **♦** Kinematics
- ♦ Laws of Motion
- ♦ Work, Energy & Power

#### Chemistry

- ♦ Some Basic concepts of Chemistry
- ♦ Atomic Structure
- ♦ Classification of Element and Periodic Properties
- ♦ Chemical Bonding & Molecular Structure
- ♦ Redox Reaction, Titration & Stoichiometry

### **Mathematics**

- ♦ Real Numbers
- ♦ Polynomials
- **♦** Linear Equations in Two Variables
- ♦ Similar Triangles
- **♦** Trigonometry
- ♦ Co-ordinate Geometry ♦ Acids, Bases and Salts

# **Physics**

- ♦ Light Reflection and Refraction
- ♦ Human Eye and Colourful World
- ♦ Electricity

### Chemistry

- **♦** Chemical Reactions & Equations
- ♦ Metals and Non-metals

### **Mathematics**

- ♦ Number System, Indices
- ♦ Linear Equation in two variable
- ♦ Lines & Angles
- ♦ Triangles
- Co-ordinate Geometry
- ♦ Heron's Formula

# **Physics**

- ♦ Motion
- Force and Laws of Motion
- ♦ Gravitation

# Chemistry

- ♦ Is Matter around us pure?
- ♦ Properties of Matter & Solutions

# Biology

- ♦ Cell: The Fundamental Unit of Life
- ♦ Why do we fall ill

### Mathematics

- ♦ Rational Numbers
- Square & Square roots
- ♦ Cube & Cube roots
- ♦ Linear Equation in One Variable
- ♦ Understanding Quadrilaterals ♦ Microorganism
- ◆ Data Handling
- ♦ Graphs

# Chemistry

- ♦ Synthetic Fibers & Plastics
- ♦ Metals and Non metals
- ♦ Coal & Petroleum

# Biology

- ◆ Crop Production & Management
- ♦ Conservation of Plants & Animals **Physics**
- ♦ Force & Pressure
- ♦ Friction
- ♦ Sound

## **Mathematics**

- ♦ Integers
- ♦ Fraction & Decimal
- Data Handling
- ♦ Simple Equations
- ♦ Lines & Angles
- Triangles and its Properties
- ♦ Congruent Triangles

## **Physics**

- ♦ Motion and Time
- ♦ Heat
- ♦ Wind, Storms and Cyclones

# Chemistry

- ♦ Fiber to Fabric
- ♦ Physical & Chemical Changes
- Acids, Bases and Salts

### Biology

- ♦ Nutrition in Plants
- Nutrition in Animals
- ♦ Respiration in Organisms
- ♦ Weather, Climate and Adaptations o Animals to Climate