

Syllabus consists of topics from Current Class and Previous Class. Students are advised to find these topics from their school text books of present and previous years and prepare thoroughly for MCQs.

## Class - VII

Physics:

- Electricity and Circuits
- Fun with Magnets
- Heat and Temperature
- Light, Shadow & Reflection
- Motion and Measurement
- Wind, Storms and Cyclones

Chemistry:

- Acid, Bases and Salts
- Animal fibre
- Changes around us
- Water and air

Biology:

- Body Movements
- Garbage in Garbage out
- Getting to know about plants
- Nutrition in Plants and Animal
- The living organisms and their surroundings
- Weather, Climate and Adaptations

Mathematics:

- Algebraic Expressions
- Data Handling
- Exponent and Powers
- Fraction and Decimal
- Integers
- Lines and Angles
- Mensuration
- Number System
- Ratio and Proportion
- Rational Number
- Simple Equation
- Triangles and Congruence of Triangles

## Class - VIII

Physics:

- Electric current and effects
- Force and Pressure
- Heat and Temperature
- Light
- Motion and Time
- Sound

Chemistry:

- Acid, Bases and Salts
- Metal and Non-Metal
- Physical and Chemical Changes
- Synthetic Fibre and Plastic
- Water

Biology:

- Cell Structure and Function
- Crop Production and Management
- Forest our Life line
- Micro Organisms
- Respiration in Organisms
- Transportation in Organisms

Mathematics:

- Congruence of Triangle
- Cubes and Cube Roots
- Exponents and Power
- Fraction and Decimal
- Integers
- Linear Equations in One Variable
- Perimeter and Area
- Practical Geometry
- Rational Number
- Squares and Square Roots
- Understanding Quadrilaterals
- Visualizing solid Shapes

## Class - IX

Physics:

- Force and NLM
- Gravitation
- Light
- Motion
- Sound
- Stars and Solar System

Chemistry:

- Combustion and Flame
- Fossil Fuels
- Is Matter Around us pure
- Matter in our surroundings
- Metal and Non-Metal

Biology:

- Cell Structure and Function
- Conservation of Plants and Animals
- Crop Production and management
- Food Production and Management
- Micro Organisms
- Reaching the age of adolescence
- Reproduction
- Tissue

Mathematics:

- Algebraic Expression
- Comparing Quantity
- Cube and Cube Root
- Exponents and Power
- Factorisation



## SYLLABUS & PATTERN

- Linear Equation
- Lines and Angles
- Mensuration
- Number System
- Polynomial
- Squares and Square Roots
- Understanding Quadrilaterals

### Class - X

Physics:

- Electricity
- Force
- Gravitation
- Magnetic Effect
- Magnetism
- Motion
- Sound
- Work Power and Energy

Chemistry:

- Acid, Bases and Salts
- Atom and molecules
- Atomic Structure
- Chemical Reaction
- Metal and Non-metal

Biology:

- Control and Co-ordination
- Diversity
- Excretion
- Nutrition
- Respiration
- Transportation in Animal
- Transportation in Plants
- Why do we fall ill
- Natural Resources

Mathematics:

- Areas of Parallelograms and Triangles
- Circles
- Heron's Formula
- Introduction Euclid's Geometry

- Linear Equation in Two Variables
- Lines, Angles and Triangles
- Number System
- Polynomial
- Probability
- Statistics
- Surface area and Volumes
- Trigonometry

### Class XI

Physics:

- Kinematics and Laws of Motion
- Physical World and Measurement
- System of Particles
- Work, Power and Energy

Chemistry:

- Chemical Bonding and Molecular Structure
- Classification of Elements and Periodicity in Properties
- Some Basic Concepts of Chemistry
- States of Matter: Gases and Liquids
- Structure of Atom

Biology:

- Cell Biology (Cell Cycle & Cell Division)
- Diversity of Animals
- Plant Diversity
- Living World
- Structural organisation in Plants & animals

Mathematics:

- Circles
- Complex Numbers
- Linear Inequalities
- Quadratic Equations
- Quadratic Inequalities
- Sequence and Series
- Sequence Differential method
- Straight Lines
- Trigonometric Functions

## EXAM PAPER PATTERN

### Class VII to X

**Part-I** : Physics; Chemistry; Biology; Maths, **Part-II** : IQ

### Class XI

**Part-I** : Physics; Chemistry; Biology/Maths (Students attempt either Biology or Maths)

**Part-II** : IQ

### Pattern of Questions :

80 Objective Type Questions | MCQs of 4 choices (single correct answer)

### Marking Scheme :

For Class VII : +4 for correct answer ( No Negative Marking for wrong answer)

For Class VIII, IX, X & XI : +4 for correct answer & -1 for wrong answer (negative marking)

### Question Distribution (Part-I: 60, Part-II : 20)

Students of Class – VII

Physics: 12, Chemistry: 11, Biology: 12, Maths: 25, IQ: 20

Students of Class – VIII, IX & X

Physics: 15, Chemistry: 15, Biology: 15, Maths: 15, IQ: 20

Students of Class – XI

Physics: 20; Chemistry: 20; and Any one of Biology : 20 / Maths : 20, IQ: 20

### Medium & Duration of Exam

Medium : English (Hindi only at Sikar) | Duration : 2 Hours.

It is Compulsory to take seat in exam hall atleast 30 minutes before test to fill OMR.