NATIONAL PRIMTALENT OLYMPIAD EXAMINATIONS

SCIENCE

CLASS VI

PHYSICS

Matter

- Composition of matter
- Characteristics of matter
- States of matter
- Properties of solid, liquid and gas
- Molecular model of solid, liquid and gas
- Change in states of matter

Force and energy

- Types of force
- Effects of force
- Force of friction
- Kinds of friction (static, sliding, rolling)
- Ways to reduce friction
- Advantages and disadvantages of friction
- Ways to increase friction
- Renewable and non-renewable energy
- Law of conservation of energy.

Simple machines

- Levers, types of levers
- Pulley, mechanical advantage of pulley
- Wheel and axle
- Inclined plane
- Wedge and screw
- Care of machines

Light

- Luminous and non-luminous
- Properties of light
- Shadows
- Formation of umbra and penumbra
- Eclipse solar and lunar eclipse

Physical quantities and measurement

- Physical quantities
- Measurement of length
- Measurement of mass
- Measurement of time
- Measurement of temperature
- Measurement of area.

CHEMISTRY

Language of chemistry

- Scientists and their contribution to chemistry
- Application of chemistry
- Harmful effects of chemistry

Common lab equipments and apparatus

- Identification of laboratory equipments
- Application of laboratory equipments

Elements and compounds

- Latin name and common name of elements with symbols
- Chemical formula of compound
- Valency of elements

Rocks and minerals

- Types of rocks
- Sedimentary
- Igneous
- Metamorphic
- Composition of rocks

BIOLOGY

Growing plants for food

- Seed and its germination
- Dispersal of seeds

Health and hygeine

- Our food and its group
- Communicable and non communicable diseases and its prevention

Human body

- Our skeletal system
- Parts of the skeleton
- Joints and its types
- Muscles and its types
- Nervous system
- Parts of nervous system
- Reflex action
- Sense organs
- Digestive system
- Its organ and their functions

Plants

- Leaf
- External structure of the leaf
- Functions and modification of leaves
- Types of venation
- Arrangement of leaves
- Vegetative propagation by leaf
- Flower
- The four whorls of a flower
- Pollination
- Fertilization
- Fruits
- Seed structures and types
- Germination

The cell

- Discovery of cells
- Cells and their numbers
- Cells and their shape
- Cell theory
- Basic structure of a cell and its function