

**PHYSICS (45 Q.)****SYLLABUS-I (Session : 2016-2017)****Topic**

Units, Dimensions and Measurement

Gravitation

Properties of Matter and Fluid Mechanics

Thermal Physics (Thermal Expansion, Calorimetry, Heat Transfer, KTG &amp; Thermodynamics)

Oscillations (SHM, Damped Oscillations, Forced Oscillation &amp; Resonance)

Wave Motion and Doppler's Effect

**SYLLABUS-II (Session : 2016-2017)****Topic**

Basic Math's &amp; Vectors

Kinematics

Laws of Motion and Friction

Work, Energy, Power

Collisions and Centre of Mass

Circular Motion

Rotational Motion

**CHEMISTRY (45 Q.)****SYLLABUS-I (Session : 2016-2017)****Topic**

Some Basic Concept of Chemistry (Mole Concept)

Atomic Structure

Periodic Table &amp; Periodicity in Properties.

Chemical Bonding

State of Matter (Liquid and Gaseous State)

Chemical Thermodynamics and Energetics

Chemical Equilibrium, Ionic Equilibrium, Acid-Base (Concepts), pH-Buffer Solution, Indicators

**SYLLABUS-II (Session : 2016-2017)****Topic**

Hydrogen and its Compound

Redox Reactions

s Block Elements Chemistry of Lighter Elements. p-Block Elements(Group13 &amp; 14 Boron &amp; Carbon Family).

Organic Chemistry-some Basic Principle, Nomenclature, Isomerism, Classification of Organic Compounds, Reaction Mechanism

Alkane, Alkene, Alkyne, Aromatic Hydrocarbon.

Environmental Chemistry

**BIOLOGY (90 Q.)****SYLLABUS-I (Session : 2016-2017)****Topic**

Diversity of Plant Life

Plant tissues, Primary Structure of Root, Stem and Leaves, Anomalous Pri. Structure, Sec. growth.

Morphology of Angiosperms - Families of Angiosperms, Important Characters and Economic Importance of Cruciferae, Malvaceae, Solanaceae, Leguminosae, Liliaceae, Gramineae, Compositae, Cucurbitaceae and Ranunculaceae, Modification of Root, Stem &amp; Leaf.

Biomolecules (Protoplasm)

Plant Physiology : Mineral and Water relation of Plants, Photosynthesis, Mineral Nutrition, Respiration, Enzymes, Growth, Growth Hormones, Plant Movements.

**SYLLABUS-II (Session : 2016-2017)****Topic**

Diversity of Animal Life

Animal Tissues

Earthworm &amp; Cockroach

Cell structure, Cell division

Human Physiology : Digestive System, Vitamins, Nutritional Imbalance and Deficiency Diseases, Excretory System

Human Physiology : Respiratory System, Circulatory System, Limb, Muscles, Skeletal

Human Physiology : Endocrine System, Eye &amp; Ear, Nervous System