

PHYSICS (45 Q.)**XI - SYLLABUS (Session : 2017-2018)****Topic**

Basic mathematics used in physics, vectors

Units, Dimensions and Measurement

Kinematics

Laws of motion and friction

Work, Energy, Power

Collisions and Centre of Mass

Circular Motion

Rotational Motion

Gravitation

Properties of matter and Fluid Mechanics

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

Oscillations (SHM, damped oscillations, forced oscillation & Resonance)

Wave Motion, Doppler's Effect

XII - SYLLABUS (Session : 2017-2018)**Topic**

Electrostatics

Capacitors

Current electricity, Thermal and Chemical effects of current

Magnetic effect of current and Magnetism

Electromagnetic Induction (EMI)

Alternating current (AC)

EM Wave

Ray optics and optical Instruments

Wave optics (Nature of Light, Interference, Diffraction & Polarisation)

Modern Physics

Semiconductor and Digital Electronics (4 Question For AIIMS)

Principle of Communication (1 Question For AIIMS)

CHEMISTRY (45 Q.)**XI - SYLLABUS (Session : 2017-2018)****Topic**

Some Basic Concept of Chemistry (Mole Concept),

Atomic Structure

Periodic Table & 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

Hydrogen and its Compound

Redox Reactions

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

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

Alkane, Alkene, Alkyne, Aromatic Hydrocarbon.

Environmental Chemistry

XII - SYLLABUS (Session : 2017-2018)**Topic**

Solid State

Solutions

Electrochemistry

Chemical Kinetics

Surface Chemistry

Heavier Metals occurrence and Extraction

p-Block Elements (15 to 18 Groups).

d Block Elements, Coordination Chemistry, f-Block Elements, Organo Metallic Compounds.

Halogen Derivatives

Mono, Di & Tri Hydric alc., Phenol, Ether

Carbonyl Compound, Carboxylic acid & its Derivatives

Amine, Aniline, Nitro Benzene, Nitro Alkane, Cyanides, Isocyanides

Biomolecules, Polymers, Chemistry in Everyday Life, Purification of Organic Compounds

BIOLOGY (90 Q.)**XI - SYLLABUS (Session : 2017-2018)****Topic**

Diversity of Plant Life

Diversity of Animal 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 & Leaf.

Animal Tissues

Earthworm & Cockroach

Cell structure, Cell division

Biomolecules (Protoplasm)

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

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 & Ear, Nervous System

XII - SYLLABUS (Session : 2017-2018)**Topic**

Human Reproduction & Reproductive Health

Reproduction and Development of Angiosperms (Life History of Angiosperms). Seed dormancy and Seed Germination.

Genetics

Origin and Evolution of Life & Mutation

Human Health & Diseases

Biotechnology

Organisms and Environment

Demography

Domestication of Plants

Domestication of Animals