

Syllabus For
PMT Combined Test (AIIMS Type) - PT – IX
Target Batch– (Date: 11.03.2018)

PHYSICS

Units and dimensions, measurement and error, vector, motion in one dimension; two dimension and three dimension, straight line motion with constant acceleration, projectile motion, relative velocity, relative acceleration and their application, graphs, Newton's law of motion, circular motion, work power and energy, Calorimetry, Kinetic theory of gases, heat and thermodynamics, Coulomb's law, electric field, motion of charge particle in the electric field, electric dipole and its motion into an electric field, Electric potential and potential difference, electric potential energy, Gauss's Law, metal and its behaviour into electric field, simple harmonic motion, Capacitor, ray optics, interference of light, modern physics, pressure in fluid, Buoyancy, flow of liquid.

CHEMISTRY

- Some basic concept of chemistry: Chemical formula, Element, compound, mixture, homogeneous and heterogeneous mixture, Atomic & molecular masses, Mole concept, Percentage composition, Empirical formula, Limiting reagent, stoichiometric calculation, Equivalent weights. Isomerism in organic chemistry, Nomenclature of organic compounds, Some important reaction, Biomolecule, polymer, solution, volumetric calculation, general organic chemistry
- alkane, alkene, alkyne, aromatic, alkyl/aryl halide, alcohol, phenol, ether, aldehyde and ketones, acids, dicarboxylic & hydroxyl- acids, amines, qualitative and quantitative analysis of organic compounds.
- Chemical kinetics and nuclear chemistry, gaseous state, surface chemistry, atomic structure, chemical equilibrium, ionic equilibrium,
- Solid state, electro chemistry, thermodynamic,
- Chemical bonding, Redox, Transition metals, Co-ordination compound, Lanthanides, Metallurgy, group-1,2, 13, 14, 15, 16, 17, 18.

BOTANY

Biological classification, plant kingdom, reproduction in flowering plants, biomolecules, cytology, plants physiology, principle of inheritance and variations. Molecular genetics, Morphology, Anatomy, Biotechnology (Principle and process, applications) microbes and human welfare, Enhancement in food production.

ZOOLOGY

Respiratory system, microbes in human welfare, nitrogen fixation, living world, human health and diseases, strategy for enhancement of food production, mineral, nutrition, evolution, reproduction and reproductive health, muscular tissue, skeletal tissue, movement and locomotion, chemical coordination. Evolution, Vascular tissue, Epithelial and connective tissue, Neural control (Nerve Impulse conduction) C.N.S. (Brain + spinal cord)

11/03/18