

Class – XII
DELETED SYLLABUS
(For the Session of 2020-21 Only)
PHYSICS
(THEORY)

Unit I : Electrostatics

Uniformly charged thin spherical shell (field inside and outside)

Unit II : Current Electricity

Carbon resistors, colour, code for carbon resistors; series and parallel combinations of resistors.

Unit III : Magnetic Effects of Current and Magnetism

Cyclotron, Magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis. Torque on a magnetic dipole (bar magnet) in a uniform magnetic field; Para-, Dia- and ferro – magnetic substances with examples. Electromagnets and factors affecting their strengths. Permanent magnets.

Unit IV : Electromagnetic Induction And Alternating Currents

Power in AC circuits, Wattless Current.

Unit V : Electromagnetic waves

Displacement Current.

Unit VI : Optics

Reflection of light, spherical mirrors, mirror formula.

Scattering of light – blue colour of the sky and reddish appearance of the sun at sunrise and sunset.

Microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers.

Polarisation, plane polarised light; Brewster's law, uses of plane polarised light and Polaroids.

Unit VII : Dual Nature of Matter and Radiation

Davisson-Germer experiment.

Unit VIII : Atoms and Nuclei

Radioactivity alpha, beta and gamma particles/rays and their properties; radioactive decay law.

Unit IX : Electronic Devices

Zener diode; Zener diode as a voltage regulator.