

CONTENT DIRECTORY

CLASS XI PART I

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- PYQ Section
- JEE Corner
- Support Section

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- PYQ Section
- JEE Corner
- Support Section

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- JEE Corner
- Support Section

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- PYQ Section
- JEE Corner
- Support Section

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- PYQ Section
- JEE Corner
- Support Section

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- PYQ Section
- JEE Corner
- Support Section

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- Basic Level

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- PYQ Section
- JEE Corner
- Support Section

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 - Semiconductor Devices, Application of Semiconductors and *p-n* Junction diode.
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- Single Concept Based Advanced Level
- PYQ Section
- JEE Corner
- Support Section

CLASS XII PART II

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- PYQ Section
- JEE Corner
- Support Section

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- Single Concept Based Advanced Level
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- Single Concept Based Advanced Level
- PYQ Section
- JEE Corner
- Support Section

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- Basic Level
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- Single Concept Based Advanced Level
- PYQ Section
- JEE Corner
- Support Section

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- Key Notes
- Basic Level
 - Explanation of Periodic Motion, Linear SHM and Differential Equation of SHM
 - Acceleration (*a*), Velocity (*v*) and Displacement *x* of SHM
 - Amplitude, Period and Frequency of SHM and Graphical Representation of SHM
 - Comparison of two SHMs, Energy of Particle in SHM.
 - Simple pendulum, Angular SHM, Free, forced oscillations and Resonance.
- Single Concept Based Advanced Level
- PYQ Section
- JEE Corner
- Support Section

14. Superposition of Waves 354-386

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- Basic Level
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 - Superposition of Waves and Stationary Waves
 - Free, Forced vibrations, Harmonics & Overtones
 - Sonometer, Characteristics of sound
- Single Concept Based Advanced Level
- PYQ Section
- JEE Corner
- Support Section

15. Wave Optics 387-415

- Key Notes
- Basic Level
 - Nature of light, Light as a wave and Huygens' Theory.
 - Reflection, Refraction at a Plane Boundary, Polarisation
 - Interference
 - Diffraction of Light, Resolving power
- Single Concept Based Advanced Level
- PYQ Section
- JEE Corner
- Support Section

16. Electrostatics 416-449

- Key Notes
- Basic Level
 - Applications of Gauss' law
 - Potential and Potential Energy, Potential due to a Point Charge and a Dipole and a System of Charge
 - Potential Energy of two Point Charges and of a Dipole
 - Conductors & Insulators, Free Bound Charges, Dielectric and Electric Polarisation.
 - Capacitors, Combination of Capacitors, Parallel Plate Capacitor, Energy Stored in a Capacitor.
 - Displacement Current
 - Van de Graaff Generator.
- Single Concept Based Advanced Level
- PYQ Section
- JEE Corner
- Support Section

17. Current Electricity 450-477

- Key Notes
- Basic Level
 - Kirchhoff's Laws of Electrical Network

- Wheatstone Bridge
- Potentiometer
- Galvanometer

- Single Concept Based Advanced Level
- PYQ Section
- JEE Corner
- Support Section

18. Magnetic Field due to Electric Current 478-507

- Key Notes
- Basic Level
 - Magnetic Force, Magnetic Force on a Wire Carrying a Current force, Biot Savart Law,
 - Torque on a Current Loop, Dipole Moment, Magnetic Potential Energy of a Dipole.
 - Magnetic Field, Magnetic Lines for a Current loop, Ampere's Law.
 - Magnetic field of a Solenoid and a Toroid.
- Single Concept Based Advanced Level
- PYQ Section
- JEE Corner
- Support Section

19. Magnetic Materials 508-528

- Key Notes
- Basic Level
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 - Magnetic Properties of Materials
 - Hysteresis, Permanent Magnet and Electromagnet, Magnetic Shielding.
- Single Concept Based Advanced Level
- PYQ Section
- JEE Corner
- Support Section

20. Electromagnetic Induction 529-553

- Key Notes
- Basic Level
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 - Motional Electromotive force, Induced emf Induction and Energy Transfer, Eddy Currents.
 - Self-Inductance, Energy Stored in a Magnetic Field, Energy Density and mutual Inductance.
 - Generators, Back emf and Torque and Transformer.
- Single Concept Based Advanced Level
- PYQ Section
- JEE Corner
- Support Section

21. AC Circuits 554-580

- Key Notes
- Basic Level
 - AC Generator, Average and RMS values, Phasors
 - Different Types of AC Circuits and Power In AC Circuits.
 - Electric Resonance and Sharpness of Resonance : Q-Factor
 - L-C Oscillations and Choke Coil.
- Single Concept Based Advanced Level
- PYQ Section
- JEE Corner
- Support Section

22. Dual nature of Radiation and Matter 581-606

- Key Notes
- Basic Level
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 - de-Broglie Hypothesis, Davisson and Germer Experiment
 - Photocell and Wave Particle Duality of Matter.
- Single Concept Based Advanced Level
- PYQ Section
- JEE Corner
- Support Section

23. Structure of Atoms and Nuclei 607-632

- Key Notes
- Basic Level
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 - Atomic Spectra, Bohr's atomic Model
 - Atomic Nucleus, Nuclear Binding Energy
 - Radioactive Decays, Law of Radioactive Decay
 - Nuclear Energy
- Single Concept Based Advance Level
- PYQ Section
- JEE Corner
- Support Section

24. Semiconductor Devices 633-659

- Key Notes
- Basic Level
 - p-n Junction Diode as a Rectifier, Special Purpose Junction Diodes
 - Bipolar Junction Transistor
 - Logic Gates
- Single Concept Based Advanced Level
- PYQ Section
- JEE Corner
- Support Section