CBSE Class 12 Physics Viva Questions - getmyuni

• Laws of Motion:

- Newton's laws of motion and their applications.
- Friction: types and laws of friction.
- Circular motion: centripetal force and its applications.

• Work, Energy, and Power:

- Work-energy theorem and its applications.
- Conservation of energy and its applications.
- Power and its units.

• Rotational Motion:

- Torque and its applications.
- Moment of inertia and its significance.
- Angular momentum and its conservation.
- Gravitation:
 - Kepler's laws of planetary motion.
 - Gravitational potential energy.
 - Escape velocity.

• Properties of Bulk Matter:

- Elasticity: Young's modulus, bulk modulus, shear modulus.
- Surface tension and its applications.
- Viscosity and its applications.

• Thermodynamics:

- Laws of thermodynamics and their significance.
- Heat engines and refrigerators.
- Calorimetry and specific heat capacity.

• Kinetic Theory of Gases:

- Kinetic interpretation of temperature.
- Ideal gas equation and its applications.
- Degrees of freedom.

• Oscillations and Waves:

- Simple harmonic motion and its characteristics.
- Resonance and its applications.
- Types of waves and their properties.
- Electrostatics:
 - Coulomb's law and electric field.
 - Electric potential and potential energy.
 - Gauss's law and its applications.
- Current Electricity:
 - Ohm's law and its limitations.
 - Kirchhoff's laws and their applications.

- Electrical power and energy.
- Magnetic Effects of Current and Magnetism:
 - Biot-Savart law and Ampere's circuital law.
 - Magnetic field due to a current-carrying conductor.
 - Magnetic properties of materials.
- Electromagnetic Induction and Alternating Currents:
 - Faraday's law of electromagnetic induction.
 - Lenz's law.
 - AC generators and transformers.
- Electromagnetic Waves:
 - Characteristics of electromagnetic waves.
 - Electromagnetic spectrum and its applications.
- Optics:
 - Laws of reflection and refraction.
 - Lenses and mirrors.
 - Interference and diffraction.
- Dual Nature of Matter and Radiation:
 - Photoelectric effect and its applications.
 - de Broglie hypothesis.
 - Atomic spectra.
- Nuclei:
 - Radioactivity and its types.
 - Nuclear fission and fusion.
 - Nuclear energy.

• Semiconductor Electronics:

- Semiconductor diodes and transistors.
- Logic gates and their applications.