Course Outcomes

B. Sc F.Y. (Semi- I) (Paper – I)

Course Code – PHY-101-Mechanics, Properties of Matter and Sound

CO-1 : Study of Mechanics, gravitational, potential field.

CO-2 : Introduction of Elasticity and study of elastic material.

CO-3 : Understanding Viscosity and surface tension of liquids.

CO-4 : Study Ultrasonic sound and its applications and Acoustics.

B. Sc F.Y. (Semi -I) (Paper – II)

Course Code – PHY-102-Heat and Thermodynamics

CO-1 : introduce about Thermal Conductivity of different , materials.

CO-2 : Learn about Real gases and Transport Phenomena.

CO-3 : Understand Thermodynamics and Thermo dynamical processes.

CO-4 : Introduction to entropy and Thermo dynamical relations.

B. Sc F.Y. (Semi - II) (Paper – IV)

Course Code – PHY-104-Geomatrical and Physical Optics

CO-1 : Review about Geometrical optics and optical instruments.

CO-2 : Study interference phenomena of light and different experiments.

CO-3 : Concept of diffraction of light and its types.

CO-4 : Polarization of light and its applications.

B. Sc F.Y. (Semi-II) (Paper – V)

Course Code – PHY-105-Elecricity and Magnetism

CO-1 : Need of Vector Algebra in electricity and magnetism.

CO-2 : Study Electrostatics and related laws.

CO-3 : Introduction of Magneto statics and related laws and applications.

CO-4 : Concept of Transient current and study of L-C-R.

- **Three theory periods per paper per week.**
- **Three practical periods per paper per week**

B. Sc S.Y. (Semi-III) (Paper – VII)

Course Code –PHY-201-Mathematical, Statistical Physics and Relativity.

CO-1 : Study about Differential and Ordinary Differential equation.

CO-2 : Introduction of Statistical basis and Classical statistics, and distribution laws.

CO-3 : Understanding of Quantum Statistics and concept of Fermi Gas

CO-4 : Theory of Relatively, Relativistic transformation equations.

B. Sc S.Y. (Semi-III) (Paper – VIII)

Course Code –PHY-202-Modern and Nuclear Physics.

CO-1 : Introduce about Photoelectric Effect and its applications.

CO-2 : Learn about X-Rays , Bragg's law , X-ray spectrum and its applications.

CO-3 : Understand Nuclear Forces and Nuclear Models.

CO-4 : Types of Particle, Accelerators and Detectors.

B. Sc S.Y. (Semi-IV) (Paper – XI)

Course Code –PHY-205- General Electronics.

CO-1 : Review Semiconductor Effect and its applications.

CO-2 : Study transistor biasing , its types, Amplifiers and its applications.

CO-3 : Concept of Oscillator and Multi vibrator and their types.

CO-4 : Introduce about Modulations, its types and demodulation.

B. Sc S.Y. (Semi-IV) (Paper – XII)

Course Code – PHY-206- Solid State Physics.

CO-1 : introduction to crystal structure and its types.

CO-2 : Study of Bonding and Bond theory of solids.

CO-3 : Study an Thermal properties of solid.

CO-4 : Study about Free Electron theory and metals and Transport Properties.

B. Sc T.Y. (Semi-V) (Paper – XV)

Course Code –PHY-301- Classical and Quantum Mechanics

CO-1 : Introduction of Classical Mechanics and its application.

CO-2 : Study of Quantum theory.

CO-3 : Learn about de-Broglie's hypothesis, Davidson – German expert, Heisenberg Uncertainty principle

CO4 : Introduce about Modulations, its types and demodulation.

B. Sc T.Y. (Semi-V) (Paper – XVI)

Course Code –PHY-302- Electrodynamics.

CO-1 : Introduction to Electrodynamics

CO-2 : Study of Time Varying Fields.

CO-3 : Study of Electromagnetic Waves.

CO-4 : Introduction of Electromagnetic Wave with Matter.

B. Sc T.Y. (Semi-VI) (Paper – XIX)

Course Code –PHY-305- Atomic , Molecular physics and LASER

CO-1 : Study of Atomic models

CO-2 : Introduction to vector atom model

CO-3 : Study of Molecular Spectra.

CO-4 : Introduction to LASER, Its type and Applications.

B. Sc T.Y. (Semi-VI) (Paper – XX)

Course Code –PHY-306- Non-conventional Energy Sources and Optical Fiber

CO-1 : Study of Non-conventional Energy Sources.

CO-2 : Introduction and Study of photovoltaic system.

CO-3 : Introduction of Optical Fiber.

CO-4 : Study on Fiber Cable and Fabrications.

Head
Department of Physics

Principal