## **PHYSICS**

## **Semester-4 (Paper 2): Modern Physics**

## **Learning outcomes**

On successful completion of this course, the students will be able to:

- Develop an understanding on the concepts of Atomic and Modern Physics, basic elementary quantum mechanics and nuclear physics.
- Develop critical understanding of concept of Matter waves and Uncertainty principle.
  Get familiarized with the principles of quantum mechanics and the formulation of Schrodinger wave equation and its applications.
- Examine the basic properties of nuclei, characteristics of Nuclear forces, salient features of Nuclear models and different nuclear radiation detectors.
- Classify Elementary particles based on their mass, charge, spin, half life and interaction.
- Get familiarized with the nanomaterials, their unique properties and applications.
- Increase the awareness and appreciation of superconductors and their practical Applications.