COURSE SPECIFIC OUTCOMES:

Course-I(a): "MECHANICS"

After study of Mechanics Course, the student is able to

- Understand the vector operations, Rotational Dynamics, Energy Transformations through different methods such as collisions, scattering,etc.
- Explain the causes for natural phenomenon like solar system, day -night, seasons etc.
- Record the observations in different situations and exchange the facts from one situation to another.

Course-I (b): "WAVES AND OSCILLATIONS"

After study of Waves and Oscillations Course, the student is able to

- Understand the origin of production and transportation of Energy in different modes.
- Apply mathematical principles to analyze different complex motions.
- Interpret different musical instruments.
- Appreciate the creation of communicational languages.
- Choose different measuring tools based on wave properties.

Course-II: "OPTICS"

After study of Optics course, the student is able to

- Understand the nature of light and properties of light.
- Choose appropriate experimental Techniques for measuring Physical quantities based on optical properties.
- Classify the materials based on optical properties.
- Understand the formation of images, construction of optical instruments.
- Solve real time problems linked to communications and security devices.

Course-III: "THERMO DYNAMICS AND RADIATION PHYSICS"

After study of Thermodynamics and Radiation Physics course, the student is able to

- Understand the relation between different thermodynamic variables, functioning of Heat engines, conditions for heat energy transportation and distribution.
- Explain conditions for phase changes of matter.
- Estimate the energy changes in reactions.
- Distinguish the materials based on thermal properties.
- Perform Experiment in controlled environment.
- Develop different measuring techniques using Radiation.
  Appreciate the importance of low temperature.

Course-IV (a): "ELECTRICITY, MANGNETISM AND ELECTRONICS"

After study of Electricity, Magnetism and Electronics course, the student is able to

- Understand the relation between different electrical variables, electrical elements and basic electrical circuits.
- Explain the construction of Different electrical Devices.
- Choose appropriate electrical and electronic devices.
- Distinguish and analyze different circuits.
- Construct suitable electronic and electrical circuits.
- Explain different methods for production and transportation of Electromagnetic energy.
- Measure the Electrical properties of materials.

Course-IV (b): "MODERN PHYSICS"

After Study of Modern Physics course, the student is able to

- Understand the atomic structure.
- Explain causes for production of energy.
- Explain techniques for structural analysis of molecules, crystals.
- Gain the knowledge about fundamental particles.
- Explain the electromagnetic spectrum