Subject Code: 18PHY12/22

Course Outcomes:

Upon completion of this course, students will be able to

1. Understand various types of oscillations and their implications, the role of Shock waves in various fields and Recognize the elastic properties of materials for engineering applications.

2. Realize the interrelation between time varying electric field and magnetic field, the transverse nature of the EM waves and their role in optical fiber communication.

3. Compute Eigen values, Eigen functions, momentum of Atomic and subatomic particles using Time independent 1-D Schrodinger's wave equation

4. Apprehend theoretical background of laser, construction and working of different types of laser and its applications in different fields

5. Understand various electrical and thermal properties of materials like conductors, semiconductors and dielectrics using different theoretical models.

Subject Code: 18PHYL16/26

Course Outcomes:

Upon completion of this course, students will be able to

1. Apprehend the concepts of interference of light, diffraction of light, Fermi energy and magnetic effect of current

2. Understand the principles of operations of optical fibers and semiconductor devices such as Photodiode, and NPN transistor using simple circuits

3. Determine elastic moduli and moment of inertia of given materials with the help of suggested procedures

4. Recognize the resonance concept and its practical applications

5. Understand the importance of measurement procedure, honest recording and representing the data, reproduction of final results