

Course Outcomes: After successful completion of the course, learner will be able to:

CO1: Develop the understanding of working principle of lasers, optical fibers and extend it to holography and fiber optic communication.

CO2: Deduce Schrödinger's wave equations and apply it to problems on the bound states by summarizing fundamentals of quantum physics.

CO3: Explain phenomena of interference in thin films, polarization, double refraction and connect to the Anti-Reflection Coating, LCD.

CO4: Develop understanding of Fermi level and Fermi energy in semiconductors on the basis of results of Fermi Dirac statistics and relate them with the working of semiconducting devices. Extend the understanding of Ultrasonic to thickness measurement, flaw detection.

CO5: Explain properties of nanoparticles and estimate engineering applications; Explain phenomenon of Superconductivity and estimate engineering applications