

### "Education for Knowledge, Science and Culture."

- Shikshanmaharshi Dr. Bapuji Salunkhe

Shri. Swami VivekanandShikshanSanstha's

# VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR



Ph.: 0231-2658612,2658840,Resi.: 0231-2653962 Fax:0231-2658840 Website: www.vivekanandcollege.org E-mail: info@vivekanandcollege.org



B. Sc. Part – II Semester -III PHYSICS (Syllabus w.e.f. 2019-20)

Course Code: DSC1001C

# Thermal Physics, Statistical Mechanics, waves and Optics Part I

Course Outcomes: After the completion of the course the student will be able to -

CO1: Demonstrate and understand the basic primary knowledge of Thermal Physics, Statistical

Mechanics, waves, and Optics. CO2: get a proficiency in solving problems in Thermal Physics, Statistical Mechanics, waves, and

CO3: Understand the basic concepts of kinetic theory of gases, transport phenomena, thermometry, thermodynamic laws, thermodynamic process, isothermal and adiabatic process, entropy, harmonic oscillations, oscillations of different frequencies, Lissajous figures, coupled oscillations, ultrasonic waves their applications, acoustic of building and reverberations

CO4: Develop the critical skill in students to understand Thermal Physics, Statistical Mechanics, waves and Optics.

#### B. Sc. Part – II Semester -IV PHYSICS Course Code: DSC1001D

# Thermal Physics, Statistical Mechanics, waves and Optics Part II

Course Outcomes: After the completion of the course the student will be able to -

CO1: Demonstrate and understand the basic primary knowledge of Electricity, Magnetism and Electromagnetic Theory and will demonstrate a proficiency in solving problems in Thevenin's theorem, and Norton's theorem, magnetism, electrostatics etc.

CO2: Understand the basic concepts of Ballistic galvanometer, networks theorem, magnetostatics and electrostatics, electricity, and magnetism etc.

CO3: get a proficiency in solving problems in gradient, divergence, Curl and their significance, Vector Integration, Line, surface and volume integrals of Vector fields, Maxwell's equations, and Electromagnetic wave propagation.

CO4: Understand the basic concepts of gradient, divergence, Curl and their significance, Gauss-divergence theorem and Stoke's theorem of vectors, Electromagnetic Induction, Maxwell's equations, and Electromagnetic wave propagation etc.



DEPARTMENT OF PHYSICS
WWW.mcanano.com.ege, Kolhapur
(AUTOHOMOUS)