

"Education for Knowledge, Science and Culture."

– Shikshanmaharshi Dr. Bapuji Salunkhe

Shri. Swami Vivekanand Shikshan Sanstha's

VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR

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UGC Recognition Under 2 F & 12(B) UGC Act 1956

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Department of Physics

B. Sc. Part – II Semester -III PHYSICS

(Syllabus w.e.f. 2022-23)

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 Optics.

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: Demonstrate 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.


HEAD
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