



"Education for Knowledge, Science, and Culture"

- Shikshanmaharshi Dr. Bapuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha's

Vivekanand College, Kolhapur
(Autonomous)



Department of physics

syllabus (w.e.f. 2024-25)

B.Sc. I SEM I

Mechanics

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

CO1 To demonstrate and understand the basic primary knowledge of Mechanician theories

CO2 Students will demonstrate a proficiency in solving problems in Vectors, Ordinary Differential Equations etc.

CO3 To understand the basic concepts of dot product, cross product, Ordinary Differential Equations, laws of motion, rotational motion, momentum and energy etc.

CO4 To develop the critical skill in students to understand laws of motion

ELECTRICITY AND MAGNETISM – I

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

CO1 To demonstrate and understand the applied knowledge of electricity, Magnetism

CO2 Students will demonstrate a proficiency in solving problems in gradient, divergence, Curl and their significance, Vector Integration, Line, surface and volume integrals of Vector fields.

CO3 To understand the basic concepts of dielectric, polarization, electric vector, electric susceptibility.

CO4 To develop the critical skill in students to understand applied knowledge of Electricity, Magnetism and Electromagnetic Theory.

B.Sc. I SEM II

Properties of Matter

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

CO1 To demonstrate and understand the basic primary knowledge of Mechanician theories in Physics.

CO2 To understand the basic concepts of elastic constants, surface tension, dynamics, viscosity, etc.

CO3 Students will demonstrate a proficiency in solving problems law of hydrostatics.



pressure, filter pump, flow of efflux, venturi pump, etc.

CO4 To develop the critical skill in students to understand Ideal and viscous fluids, Flow of liquid, Poiseuille's method, etc

ELECTRICITY AND MAGNETISM – II

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

CO1 To demonstrate and understand the basic primary knowledge of Electricity, Magnetism and Electromagnetic Theory.

CO2 Students will demonstrate a proficiency in solving problems in magnetism, series circuit, impedance etc.

CO3 To understand the basic concepts of Ballistic galvanometer, magnetic materials and electromagnetic induction etc.

CO4 To develop the critical skill in students to understand magnetic materials, hysteresis curve.



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