

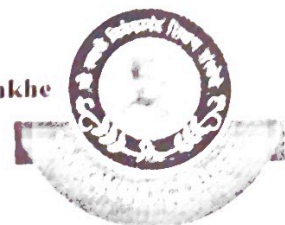


"Education for Knowledge, Science, and Culture"

- Shikshanmaharshi Dr. Bapuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha's

**Vivekanand College, Kolhapur  
(Autonomous)**



KOLHAPUR (AUTONOMOUS)

## Department of Physics

**B. Sc. Part – I Semester -I PHYSICS**

(Syllabus w.e.f. 2021-22)

Course Code: DSC1001A

### Mechanics

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

CO1: Demonstrate and understand the basic primary knowledge of Mechanics theories in Physics and develop the critical skill in students to understand mechanics.

CO2: get a proficiency in solving problems in Vectors, Ordinary Differential Equations, basic concepts of dot product, cross product, Ordinary Differential Equations, laws of motion, rotational motion, momentum and energy etc.

CO3: get a proficiency in solving problems in Elasticity, gravitation, oscillation, Differential equation of Simple harmonic motion, special theory of relativity etc.

CO4: Understand the basic concepts of elastic constants, gravitation and Kepler's laws, Simple harmonic motion, etc.

**B. Sc. Part – I Semester -II Physics**

Course Code: DSC1001B

### ELECTRICITY AND MAGNETISM

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

CO<sub>1</sub>: 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.

CO<sub>2</sub>: Understand the basic concepts of Ballistic galvanometer, networks theorem, magnetostatics and electrostatics, electricity, and magnetism etc.

CO<sub>3</sub>: 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.

CO<sub>4</sub>: 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.



*Dr. Anurag*  
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