

Shree Swami Vivekanand Shikshan Sanstha Kolhapur,
DATTAJIRAO KADAM ARTS, SCIENCE AND COMMERCE COLLEGE,
ICHALKARANJI

Course Outcomes

ELECTRICITY AND MAGNETISM - I (PAPER- III)

B.Sc. I, Semester: I (PHYSICS)

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This course gives quick introduction to Electricity and magnetism. This course gives an overview and understanding of basic physics. It provides a basis for further study of vectors, electricity and magnetism. Content will include: Gradient of scalar field, divergence of vector field, curl of vector field, Line, Surface and volume integral of vector field, Gauss' diversion theorem and their physical significance, Electric flux, electric dipole, capacitance of isolated spherical conductor, capacitance of parallel plate condenser, polarization, parallel plate capacitor with completely filled dielectric.

Course Outcomes:-

1. Show an understanding of principles of vector analysis and concepts of electrostatics
2. Understand the ideas regarding to electric field as containing energy and capacitance of a parallel plate capacitor, capacitance of spherical and cylindrical condensers
3. Apply methodologies vector analysis while solving problems
4. Use mathematical and vectorial operations to quantify and analyse the nature of electric forces and field
5. Solve problems involving combinations of electric force, electric field and electric potential quantities