

SYLLABUS :-

Different coordinate systems; Concept of gradient, curl and divergence of vector fields; Stoke's and Divergence theorems and applications; Electrostatic field: Coulomb's law and its application to calculate field due to point charge and for various known charge distribution (such as line, circular, surface and volume charge distribution). Concept of potential function and its relationship with electric field. Gauss theorem & its application. Energy density in terms of field quantities. Field due to a dipole; Polarisation in dielectric materials; concept of relative permittivity. Boundary conditions at the interface of two mediums. Poisson