SYLLABUS :-

Introduction â Background - Concepts of Finite Element â discretisation techniques â Concepts on Weighted Residual and Direct continuum approach. Development of Element Library for 1-D Analysis â Concept of Shape function - Use of 1-D Elements for Analysis â Local co-ordinate system. Development of Element Library for 2-D Analysis â Quadrilateral, Triangular Elements â Local Co-ordinate, Jacobian, Isoparametric Elements - Numerical Integration Technique; Application of 2-D Elements for Plane Stress and Plane Strain Problems â Stress evaluation â difficulties. Analysis of Axisymmetric Problems; Plate bending Problem â Application of different types of Problems; Shell Element â Application of Finite Element to Shell Problems, Application Problems