

PCCI4301 **DESIGN OF CONCRETE STRUCTURES** (3-0-0)

Module I : Properties of concrete and reinforcing steel, philosophy, concept and methods of reinforced concrete design, introduction to limit state method, limit state of collapse and limit state of serviceability, application of limit state method to rectangular beams for flexure, shear, bond and torsion

Module II : Design of doubly reinforced beams, design of T and L beams, design of one way and two way slabs, design of staircases.

Module III: Design of short and long columns with axial and eccentric loadings, Design of isolated and combined column footings

Reference Books:

1. Limit State Design-A.K.Jain, Neemchand & Bros, Roorkee
2. Design of concrete structures by J.N.Bandyopadhyay, PHI pvt ltd.
3. Limit State Design of Reinforced Concrete -P.C Verghese
4. RCC Design-B.C.Punmia, A.K.Jain and A.K.Jain-Laxmi Publications
5. Design of Reinforced Concrete Structures: Pillai & Mennon, TMH Publ