

SECOND YEAR – THIRD SEMESTER

AC 305	STRUCTURES – III	(L=2,S=2,W=0)	CREDITS = 03
	INTERNAL ASSESSMENT(TERM WORK)	= 50	CONTACT HRS/WK = 04
	UNIVERSITY EXAMINATION	= 50	

Focus: Analysis of Structures

Contents: Definition of determinate and indeterminate structures. Fixed beam and Continuous Beams. Basic methods of Analysis (Moment Distribution Method). Introduction to advanced methods of analysis. Analysis of continuous beams of two to four spans. Truss, types of trusses, analysis of two-dimensional trusses using joint & graphical method. Arch, types of arches, analysis of three hinges arches. Concept and analysis of portal frame. Concept of deflection of structures and importance of deflection in design of structures.

Methods: Study of deflection of beams, trusses and frames through models.

REFERENCES:

SR.NO.	TITLE	AUTHOR
01.	Mechanics of Structures – I & II	S.B.Jurnarkar & H.J.Shah
02.	Strength of Materials	B.C.Punamia
03.	Strength of Materials	R.S.Khurmi
04.	Elementary Structural Analysis	Norris & Wilbur
05.	Fundamentals of Structural Analysis & Design	J.P.Parikh