Date :	05/01/2017	**G.H.RAISONI COLLEGE OF ENGG. AND MANAGEMENT(ENGG)(PUNE)**	Run By.	GIRISH JOSHI
Time :	11:40 37	SYLLABUS PLANNING REPORT		

Faculty : Smita Kuralkar(152)

Class : Civil (STRUCTURAL ENGINEERING)(PG) - SECOND SEMESTER(A)

Subject : Theory of Plates and Shells (T)

Sr.No	Unit	Topic	From Date	To Date	No. of Lectures
1	Module I	Thin and thick plates, small and large deflections. Small deflection theory of Thin plates: Assumptions, Moment Curvature relations. Stress resultants. Governing differential equation in Cartesian co-ordinates, various boundary conditions. Pure Bending of Plates	02/01/2017	10/01/2017	6
2	Module II	Navier solution for plates with all edges simply supported. Distributed loads, point loads and rectangular patch load.	12/01/2017	20/01/2017	6
3	Module III	Distributed load and line load. Plates under distributed edge moments. Raleigh- Ritz approach for simple cases in rectangular plates. Reissener - Mindlin Theory, Moment curvature relationship for First order shear deformation theory	23/01/2017	31/01/2017	6
4	Module IV	Analysis of circular plates under axi-symmetric loading. Moment Curvature relations. Governing differential equation in polar co-ordinates. Simply supported and fixed edges. Distributed load, ring load, a plate with a central hole.	02/02/2017	10/02/2017	6
5	Module V	Classification of shells on geometry, thin shell theory, equations to shell surfaces, stress resultants, stress- displacement relations, compatibility and equilibrium equations. Shells of Revolution: Membrane theory, equilibrium equations, strain displacement relations, boundary conditions, cylindrical, conical and spherical shells.	13/02/2017	21/02/2017	6
6	Module VI	Membrane theory: Equilibrium equations, strain displacement relations, boundary conditions.	23/02/2017	03/03/2017	6
7	Module VII	Equilibrium equation, strain displacement relations, governing differential equation, solution for a simply supported cylindrical shell, various boundary conditions. Application to pipes and pressure vessels.	06/03/2017	14/03/2017	6
8	Module VIII	Principles of Lundgren’s beam theory, beam analysis, arch analysis and application to cylindrical roof shells.	16/03/2017	24/03/2017	6