

LESSON PLAN

Department of Civil Engineering

I M.Tech I SEM, Tps, 2015-16

Period	Date	Topic	Unit No	Teaching Methodology	Cumulative Periods
1, 2	07-10-2015	Introduction on theory of plates and shells	I	CR/BB	2
3,4	12-10-2015	Notation for forces and stresses & components of stresses	I	CR	4
1,2	14-10-2015	Components of strain- Hooke's law	I	CR	6
3,4	26-10-2015	Plane stress and plane strain analysis	I	CR	8
1,2	28-10-2015	Plane stress and plane strain, Stress at point & strain at point	I	CR	10
3,4	2-11-2015	Differential equation of equilibrium and boundary conditions	I	CR/BB	12
1,2	04-11-2015	Compatibility equation boundary conditions and stress function	I	CR	14
3,4	09-11-2015	Two – Dimensional problems in rectangular coordinates – solution by polynomials	II	CR	16
1,2	11-11-2015	Saint-venant's principle	II	CR/BB	18
3,4	23-11-2015	Determination of displacements, bending of simple beams, application of fourier series for two dimensional problems for gravity loading	II	CR	20
1,2	24-11-2015	Two – Dimensional problems in polar coordinates general equation in polar coordinates	III	CR	22
3,4	25-11-2015	Strain components in polar coordinates-displacements for symmetrical stress distribution	III	CR	24
1,2	02-12-2015	Circular discs-stress on plates with circular holes	III	CR	26
3,4	04-12-2015	Analysis of stress and strain in three dimensional principle stress – strain ellipsoid and stree director surface	IV	CR	28
1,2	21-12-2015	Determination of principal stress maximum shear stress	IV	CR/BB	30
3,4	23-12-2015	Homogenous deformation principle axes of strain	IV	CR	32

1,2	26-12-2015	Torsion of prismatical bars	IV	CR	34
3,4	30-12-2015	Bars with elliptical cross section	IV	CR/BB	36
1,2	04-01-2016	Other elementary solution membranes analogy	IV	CR	38
3,4	06-01-2016	Torsion of rectangular Bars	IV	CR/PPT	40
1,2	11-01-2016	Theory of plasticity introduction	V	CR/BB/PPT	42
3,4	18-01-2016	Concepts of Plasticity	V	CR	44
1,2	21-01-2016	Assumptions of plasticity	V	CR	46
3,4	23-01-2016	Torsion: Torsion of straight bars	VI	CR	48
1,2	27-01-2016	Saint venent's solution- stress function	VI	CR/PPT/BB	50
3,4	29-01-2016	Warp function – Elliptical cross section	VI	CR/PPT/BB	52
1,2	29-0-2016	Membrane Analogy and torsion of narrow rectangular cross section	VI	CR/PPT/BB	54

NOTE: C.R / BB- Class Room Teaching (Black Board, PPT)

Signature