

LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
1,2	21/12/15	General Consideration in design.	I	Black board		
		Material and their properties	I	"		
3,4	23/12/15	Material selection.	I	"		
		and Manufacturing considerations.	I	"		
1,2	25/12/15	Simple stress, and strain	I	"		
		Torsion, bending stress.	I	"		
3,4	29/12/15	Various theory of failure	I	"		
		FOS ; Design of strength and rigidity.	I	"		
1,4	4/1/16	Concept of stiffness	I	"		
		In torsion, bending, torsion ; Design build in fatigue and toughness	I	"		
3,4	6/1/16	Stress concentration factor F.S.C.F ; T.S.C.F	I	"		
1,2	12/1/16	Notch sensitivity. Design for fluctuating stresses.	I	"		
3,4	13/1/16	Endurance limit	I	"		
		Endurance strength				
1,2	15/1/16	Goodman line, Soderberg line	I	"		
3,4	20/1/16	Design for Reversed Torsion, Cyclic Fatigue loading	I	"		

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1, 2	25/1/16	Design of boiler joint	<u>II</u>	Black Board		
	27/1/16	Design of longitudinal butt joint				
1, 2	1/2/16	Design of circumferential lap joint	<u>II</u>	"		
		Lap joint				
3, 4	3/2/16	Design of welded Tank with stress	<u>II</u>	"		
		Eccentric loaded joint				
3, 4	8/2/16	Strength of transverse fillet welded joint	<u>II</u>	"		
1, 2	10/2/16	Strength of parallel fillet welded joint	<u>II</u>	"		
1, 2	15/2/16	Axial loaded asymmetrical welded joints	<u>II</u>	"		
3, 4	17/2/16	Polar Moment of Inertia and Section modulus of weld	<u>II</u>	"		
1, 2	22/2/16	Design of bolted joints with stress	<u>III</u>	"		
		Stress, eccentric loaded joint				
1, 2	25/2/16	locking devices; Bolt of uniform strength; Deformed Bolt	<u>III</u>	"		
3, 4	29/2/16	Stress in a thick cylindrical shell due to internal pressure	<u>III</u>	"		

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1,2	1/3/16	change in Dimension of thin cylindrical	<u>III</u>	Black Board	
		shell due to Internal Pressure; and spherical shell.			
3,4	8/3/16	Thick cylindrical shell subjected to Internal pressure	<u>III</u>	"	
1,2	14/3/16	Compound cylindrical shell; head; Cover plates.	<u>III</u>	"	
3,4	18/3/16	Design of key & cotter joint.	<u>IV</u>	"	
1,2	21/3/16	Spigot & socket sleeve & cotter.	<u>IV</u>	"	
3,4	23/3/16	Sib; cotter joint knuckle joint	<u>IV</u>	"	
1,2	28/3/16	Design of solid hollow shaft for strength & rigidity	<u>IV</u>	"	
3,4	30/3/16	Design of shaft for combined bending and axial load.	<u>IV</u>	"	
1,2	4/4/16	Shaft speed: Bk rates, use of Internal & external screws, gaskets, seals.	<u>IV</u>	"	

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