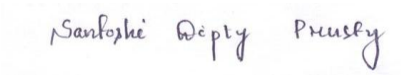
PNS SCHOOL OF ENGINEERING & TECHNOLOGY

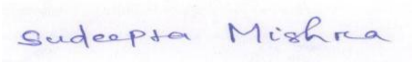
LESSION PLAN

BRANCH-CIVIL	SEMESTER-5th	NAME OF THE FACULTY-ER. MRS. SANTOSHI DIPTY PRUSTY
SUBJECT-STRUCTURAL DESIGN -II	NO OF DAYS PER WEEK -6 CLASS ALLOTTED-60	SEMESTER FROM-01/08/2023 TO 30/11/2023
WEEK	**CLASS DAY**	**THEORY TOPIC**
AUGUST-1ST	2ND	**Introduction:** Common steel structures
	3RD	Advantages & disadvantages of steel structure
	4TH	Loads and load combinations
	5TH	Types of steel, properties of structural steel, Common steel structures, Advantages & disadvantages of steel structures.
2ND	1ST	Rolled steel sections, special considerations in steel design
	2ND	Structural analysis and design philosophy
	3RD	Brief review of Principles of Limit State designs
	4TH	**Structural Steel Fasteners and Connections.**
	5TH	Bolted Connection introdution,
3RD	1ST	Classification of bolts, advantages and disadvantages of bolted connections.
	3RD	Different terminology, spacing and edge distance of bolt holes
	4TH	Types of bolted connections
	5TH	Types of action of fasteners, assumptions and principles of design.
4TH	1ST	Strength of plates in a joint, strength of bearing type bolts (shear capacity& bearing capacity), reduction factors, and shear capacity of HSFG bolts.
	2ND	Analysis & design of Joints using bearing type and HSFG bolts (except eccentric load and prying forces) Efficiency of a joint
	3RD	**Welded Connections:**
	4TH	Advantages and Disadvantages of welded connection
	5TH	Types of welded joints and specifications for welding
SEPTEMBER-1ST	5TH	**Design of Steel Compression members:**
2ND	1ST	Common shapes of compression members.ITS CONTINUING
	4TH	Design stresses in welds, Strength of welded joints
	5TH	analysis & design of welded Joints
		Design of Steel tension Members:

3RD	1ST	Common shapes of tension members.
	2ND	Maximum values of effective slenderness ratio
	3RD	Analysis and Design of tension members.(Considering strength only and concept of block shear failure.)
	4TH	**Design of Steel Compression members.**
	5TH	Common shapes of compression members
4TH	1ST	Buckling class of cross sections, slenderness ratio
5TH	1ST	Design compressive stress and strength of compression members
	2ND	**Design of Steel beams:**
	3RD	Common cross sections and their classification
	4TH	Deflection limits, web buckling and web crippling.
OCTOBER-1ST	3RD	Design of laterally supported beams against bending and shear.- **Design of Tubular Steel Structures:**
	4TH	Round Tubular Sections, Permissible Stresses
2ND	1ST	Tubular Compression & Tension Members
	2ND	Joints in Tubular trusses
	3RD	numericals based on tubular sections
	4TH	numericals based on tubular sections
	5TH	round tubular section problems
3RD	1ST	**Design of Masonry Structures:**
	2ND	Design considerations for Masonry walls & Column
	3RD	Load Bearing & Non-Load Bearing walls
5TH	1ST	Permissible stresses
	2ND	Slenderness Ratio
NOVEMBER-1ST	3RD	numericals
	4TH	numericals
	5TH	reduction factors, and shear capacity of HSFG bolts
2ND	1ST	Slenderness Ratio
	2ND	Effective Length,
	3RD	Height & Thickness
	4TH	ITS CONTINUING AND END
	5TH	IMPORTANT QUESTIONS AND ANSWER DISSCUSSION
3RD	2ND	IMPORTANT QUESTIONS AND ANSWER DISSCUSSION
	3RD	IMPORTANT QUESTIONS AND ANSWER DISSCUSSION
	4TH	IMPORTANT QUESTIONS AND ANSWER DISSCUSSION
	5TH	IMPORTANT QUESTIONS AND ANSWER DISSCUSSION
4TH	1ST	REVESION
	2ND	REVESION
	3RD	REVESION
	4TH	REVESION
	5TH	REVESION

5TH	2ND	REVESION
	3RD	REVESION
	4TH	REVESION





LECTURE SIGN

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