

## MEHRAN UNIUVERSITY OF ENGINEERING AND TECHNOLOGY

FRM-001/00QSP-004

TENTATIVE TEACHING PLANDec.01.2001DEPARTMENT OF CIVIL ENGINEERING

Name of Teacher: **Dr.Fahad Rehman Abro** 

Subject: Mechanics of Solids-I

Semester Starting Date: 15-07-2024

Batch: 23CE (C+D) Year: 3<sup>rd</sup> Semester: Course Code: CE 212

Semester Suspension Date: 06-11-2024

Course Learning Outcomes (CLOs):

Upon successful completion of the course, the student will be able to:

CLO No.	Description	Taxonomy level	Associated PLO
1	SOLVE problems related to simple stress and strain in members subjected to linear.	C3	1
2	ANALYZE simple beams subjected to simple bending loads and explain torsion and energy theory.	C4	2

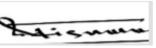
Sr. #	Description of Topic	CLO's	No. of Lec. Req.
1.	Introduction to the subject, Course outline, Reference books	1	1
2.	Stress, strain and Hooks Law	1	1
3.	Deformation of a body due to force acting on it	1	2
4.	Deformation of a body due to self weight	1	1
5.	Principle of superposition	1	2
6.	Deformation in the bars of different sections	1	1
7.	Stresses & strains in statically indeterminate structures	1	2
8.	Thermal stress in simple and composite bars	1	2
9.	Modulus of Elasticity, Poisson's Ratio, Bulk Modulus	1	1
10.	Relationship b/w bulk modulus & young's modulus	1	1
11.	Shear modulus, Relationship b/w young's modulus & shear modulus	1	2
112.	Centre of gravity	2	1
15.	Moment of Inertia	2	1
16.	Moment of inertia of different sections	2	3
17.	Moment of inertia of composite sections, Product of Inertia	2	2
19.	Bending stress and determination of flexural formula	2	2
21.	Strain energy stored in a body due to gradual, sudden and impact loads	2	2
22.	Strain energy stored in a body of varying section	2	2
23.	Theory of torsion of solids	2	2
24.	Torsion of circular shafts	2	1
	Total Lectures		32

144

Signature of Teacher:

**Remarks of DMRC: APPROVED** 

Signature of Chairman:



Dated: 18-09-2024

Dated: 10-09-2024