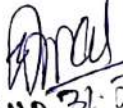



ACADEMIC SESSION: 2023-24 (Winter-2023)

Discipline : Mechanical Engineering		Semester : 3 rd	Name of the Teaching Faculty : Baneswar Munda Designation: Workshop Superintendent	
Subject : Strength of Material		Semester From date: 01/08/2023 to 30/11/2023		
SL NO.	DATE	CHAPTER	THEORY TOPIC NAME	NO.OF PERIODS
1	1.08.23	1.Simple Stress and Strain.	Types of load, stresses & strains,(Axial and tangential)	1
2	2.08.23		Hooke's law, Young's modulus, bulk modulus, Poisson's ratio	1
3	4.08.23		Derivation of the relation between three elastic constants.	1
4	5.08.23		Principle of superposition	1
5	7.08.232		stresses in composite section	1
6	8.08.23		Temperature stress, determination of the temperature stress in composite bar(single core)	1
7	10.08.23		Strain energy and resilience, Stress due to gradually applied, suddenly applied	1
8	11.08.22		Stress due to suddenly applied load and impact load	1
9	14.08.22		Numericals on above topic.	1
10	17.08.23	2.Thin Cylinder and Spherical shell under internal pressure.	Thin cylinder and spherical shell and its use	1
11	18.08.23		Definition of hoop stress and strain, longitudinal stress, strain	1
12	21.08.23		Derivation of hoop stress, hoop strain	1
13	22.08.23		Derivation of longitudinal stress and strain	1
14	24.08.23		Derivation of volumetric strain	1
15	25.08.23		Computation of the change in length, diameter and volume	1
16	28.08.23		Simple Numericals on above	1
17	29.08.23	3.Two Dimensional Stress System.	Determination of normal stress on oblique plane.	1
18	31.08.23		Determination of shear stress on oblique plane.	1
19	01.09.23		Determination of resultant stress on oblique plane	1

	06.11.23	6. Combined direct and bending stress.	Maximum & Minimum stresses on column subjected to stress	1
42	07.11.23		Buckling load computation using Euler's formula (no derivation) in various end conditions	1
43	10.11.23		Numerical problems on above.	1
44	13.11.23	7. Torsion.	Assumption of pure torsion	1
45	16.11.23		The torsion equation for solid shaft	1
46	17.11.23		The torsion equation for hollow circular shaft	1
47	23.11.23		Comparison between solid and hollow shaft subjected to pure torsion	1
48	24.11.23		Revision of whole subject	1
49	30.11.23		Revision of whole subject	1
			TOTAL CLASS	49

Prepared By,
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w/s Supt.
G.P. Sonapat


H. V. D. 31.7.23
Dept. of Mech. Engg


31/7/23
Academic Coordinator