LESSON PLAN-WINTER 2023 SWAMI VIVEKANANDA SCHOOL OF ENGINEERING & TECHNOLOGY, BBSR		
DISCIPLINE-	SEMESTER- 3RD	NAME OF THE FACULTY: ER. Kunal Pradhan
SUBJECT-STRENGTH OF MATERIAL	NO. OF CLASS ALLOTED/ PER WEEK-5	SEM. From date: 01.08.2023 TO 30.11.2023 No. of weeks:19th
WEEK	CLASS DAY	THEORY TOPIC
1ST	1.08.2023	Simple stress & strain
	2.08.2023	Axial and tangential Hooke's law
	3.08.2023	Young's modulus, bulk modulus, modulus of rigidity
	4.08.2023	Poission ratio, derive the relation bvetween three elastic constants
	5.08.2023	DO
2ND	7.08.2023	Principle of superposition
	9.08.2023	Stresses in composite section
	10.08.2023	Temperature stress, Determine the temperature stress in composite bar
	11.08.2023	Strain energy and resilience, Stress due to gradually applied, suddenly
3RD	14.08.2023	Problems on Stress and strain
	16.08.2023	Problems on Stress and strain
	18.08.2023	Thin cylinder and spherical shell under internal pressure
4TH	21.08.2023	Hoop and Longitudinal stress, strain
	22.08.2023	Derivation of Hoop and Longitudinal stress, Hoop and Longitudinal
	24.08.2023	Derivation of Volumetric strain
	25.08.2023	Problems on above
5TH	28.08.2023	**Monthly Test**
	29.08.2023	Computation of change in length , diameter and volume
	30.08.2023	Computation of change in length , diameter and volume
6TH	1.09.2023	Problems on above
7TH	4.09.2023	Problems on above
	5.09.2023	Location of principal plane and computation of principal stress
	8.09.2023	Location of principal plane and computation of principal stress
	9.09.2023	Mohr's circle
8TH	11.09.2023	Maximum shear stress using Mohr's circle
	12.09.2023	Bending moments and shear force
	13.09.2023	Types of beam and load
	14.09.2023	Concepts of shear force and bending moment
	15.09.2023	Shear force and bending moment diagram and its salient features
9TH	18.09.2023	Shear force and bending moment diagram and its salient features
	21.09.2023	DO
	22.09.2023	simply supported beam and over hanging beam under point loa s &
	23.09.2023	simply supported beam and over hanging beam under point loa s &
	21.09.2023	Theory of simple bending
10TH	25.09.2023	Assumptions in the theory of bending
	29.09.2023	Bending equation, moment of resistance, section modulus and neutral
11TH	3.10.2023	Solve simple problems.
	5.10.2023	Solve simple problems.
12TH	9.10.2023	Revision Class
	11.10.2023	**Internal Accessment**

	13.10.2023	Bending equation, moment of resistance, section modulus and neutral
13TH	17.10.2023	Combined direct and bending stresses
	19.10.2023	Define column, Axial load, Eccentric load on column
14TH	28.10.2023	Direct stresses, bending stresses, maximum and minimum stresses
15TH	3.11.2023	Numerical problems on above
16TH	6.11.2023	Bucking load computaion using Euler's formula (no derivation) in
	8.11.2023	Numerical problems on above
	10.11.2023	Bucking load computaion using Euler's formula (no derivation) in
17TH	14.11.2023	Bucking load computaion using Euler's formula (no derivation) in
	16.11.2023	Assumption of pure torsion
	18.11.2023	The torsion equation for solid and hollow circular shaft
18TH	22.11.2023	The torsion equation for solid and hollow circular shaft
	24.11.2023	Comparison between solid and hollow shaft subjected to pure torsion
	25.11.2023	Comparison between solid and hollow shaft subjected to pure torsion
19TH	27.11.2023	Numerical problems
	29.11.2023	Numerical problems
	30.11.2023	Numerical problems
HOD SIGN.		

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