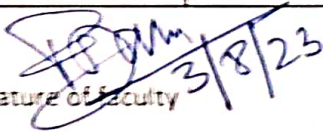


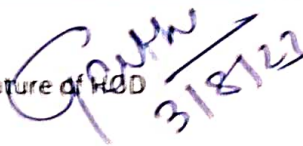
SESSION:		WINTER 2023				
BRANCH:		MECHANICAL ENGINEERING				
SEMESTER:		3RD SEC-B				
SUBJECT:		STRENGTH OF MATERIAL (th-2)				
NAME OF THE FACULTY:			RAJEEB LOCHAN DASH			
SL NO.	MONTH	CHAPT. NO.	DATE	TOPICS TO BE COVERED	NO. OF ACADEMIC DAYS AVAILABLE FOR THE SUBJECT	% COVERED
1	Aug-23	CH-1	4/8/2023	1.1 Types of load, stresses	17	29%
			5/8/2023	strains, (Axial and tangential) Hooke's law		
			8/8/2023	Young's modulus, bulk modulus, modulus of rigidity, Poisson's ratio		
			10/8/2023	derive the relation between three elastic constants		
			11/8/2023	derive the relation between three elastic constants		
			12/8/2023	derive the relation between three elastic constants		
			17/8/23	Simple problems on above		
			18/8/23	Simple problems on above		
			19/8/23	1.2 Principle of super position		
			21/8/23	stresses in composite section		
			22/8/23	1.3 Temperature stress, determine the temperature stress in composite bar (single core)		
			24/8/23	1.4 Strain energy and resilience, Stress due to gradually applied		
			25/8/23	suddenly applied and impact load		
		26/8/23	1.5 Simple problems on above			
28/8/23	Simple problems on above					
2	Sep-23	CH-2	29/8/23	2.1 Definition of hoop and longitudinal stress	20	34%
			31/8/23	Definition of hoop and longitudinal strain		
			1/9/2023	2.2 Derivation of hoop stress, longitudinal stress, hoop strain, longitudinal strain and volumetric strain		
			2/9/2023	Derivation of hoop stress, longitudinal stress, hoop strain, longitudinal strain and volumetric strain		
			4/9/2023	2.3 Computation of the change in length, diameter and volume		
			5/9/2023	2.3 Computation of the change in length, diameter and volume		
		7/9/2023	2.4 Simple problems on above			
8/9/2023	2.4 Simple problems on above					
9/9/2023	3.1 Determination of normal stress, shear stress and resultant stress on oblique plane	CH-3				

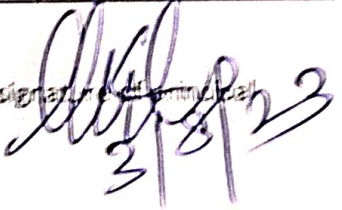
2	Sep-23	CH-3	11/9/2023	3.1 Determination of normal stress, shear stress and resultant stress on oblique plane	20	30%
			12/9/2023	3.3 Location of principal plane and computation of principal stress		
			14/9/23	Maximum shear stress using Mohr's circle		
			15/9/23	Maximum shear stress using Mohr's circle		
			16/9/23	Simple problems on above		
			21/9/23	Simple problems on above		
			22/9/23	Simple problems on above		
		CH-4	23/9/23	4.1 Types of beam and load		
			25/9/23	4.2 Concepts of Shear force and bending moment		
			26/9/23	4.3 Shear Force and Bending moment diagram and its salient features illustration in cantilever beam		
			28/9/23	4.3 Shear Force and Bending moment diagram and its salient features illustration in cantilever beam		
			29/9/23	simply supported beam and over hanging beam under point load and uniformly distributed load		
			30/9/23	simply supported beam and over hanging beam under point load and uniformly distributed load		
3	Oct-23	CH-4	3/10/2023	simply supported beam and over hanging beam under point load and uniformly distributed load	10	17%
			5/10/2023	simply supported beam and over hanging beam under point load and uniformly distributed load		
			6/10/2023	Simple problems on above		
			7/10/2023	Simple problems on above		
			9/10/2023	Simple problems on above		
			10/10/2023	Simple problems on above		
		CH-5	12/10/2023	5.1 Assumptions in the theory of bending		
			13/10/23	5.2 Bending equation, Moment of resistance		
			14/10/23	5.2 Bending equation, Moment of resistance		
			31/10/23	Section modulus & neutral axis		
4	Nov-23	CH-5	2/11/2023	5.3 Solve simple problems	12	20%
			3/11/2023	5.3 Solve simple problems		
			4/11/2023	5.3 Solve simple problems		
			6/11/2023	5.3 Solve simple problems		
		CH-6	7/11/2023	Define column		
			9/11/2023	6.2 Eccentric load on column		
			10/11/2023	Eccentric load on column		
			13/11/23	Solve simple problems		
			14/11/23	Solve simple problems		
			16/11/23	Solve simple problems		
			17/11/23	REVISE CH-1,2		
			18/11/23	REVISE CH-3,4		

BRIEF SUMMARY OF THE PLAN

SL. NO.	MONTH	UNIT/CHAPTER TO BE COVERED	% COVERAGE
1	AUGUST	chapter - 1 & 2	25%
2	SEPTEMBER	chapter - 2, 3 & 4	34%
3	OCTOBER	chapter - 4 & 5	17%
4	NOVEMBER	chapter - 5 & 6	20%

signature of faculty  3/8/23

signature of HOD  3/8/23

signature of  3/8/23