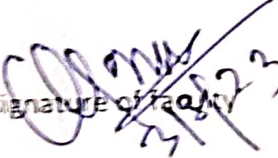


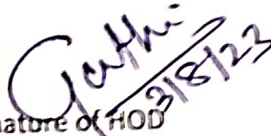
SESSION:		WINTER 2023				
BRANCH:		MECHANICAL ENGINEERING				
SEMESTER:		3RD SEC-A				
SUBJECT:		STRENGTH OF MATERIAL (TH-2)				
NAME OF THE FACULTY:			NARAYAN KAR			
SL NO.	MONTH	CHAPT. NO.	DATE	TOPICS TO BE COVERED	NO. OF ACADEMIC DAYS AVAILABLE FOR THE SUBJECT	% COVERED
1	AUG.-23	CH-1	5/8/2023	1.1Types of load, stresses	16	30%
			8/8/2023	strains,(Axial and tangential) Hooke's law		
			9/8/2023	Young's modulus, bulk modulus, modulus of rigidity, Poisson's ratio		
			10/8/2023	derive the relation between three elastic constants		
			12/8/2023	derive the relation between three elastic constants		
			16/8/23	derive the relation between three elastic constants		
			17/8/23	Simple problems on above		
			19/8/23	Simple problems on above		
			21/8/23	1.2Principle of super position		
			22/8/23	stresses in composite section		
			23/8/23	1.3Temperature stress, determine the temperature stress in composite bar (single core)		
			24/8/23	1.4Strain energy and resilience, Stress due to gradually applied		
			26/8/23	suddenly applied and impact load		
		28/8/23	1.5Simple problems on above			
29/8/23	Simple problems on above					
		CH-2	31/8/23	2.1Definition of hoop and longitudinal stress		
2	Sep-23	CH-2	2/9/2023	Definition of hoop and longitudinal strain	16	30%
			4/9/2023	2.2Derivation of hoop stress, longitudinal stress, hoop strain, longitudinal strain and volumetric strain		
			5/9/2023	Derivation of hoop stress, longitudinal stress, hoop strain, longitudinal strain and volumetric strain		
			7/9/2023	2.3Computation of the change in length, diameter and volume		
			9/9/2023	2.3Computation of the change in length, diameter and volume		
			11/9/2023	2.4Simple problems on above		
			12/9/2023	2.4Simple problems on above		


2	Sep-23	CH-3	13/9/23	3.1 Determination of normal stress, shear stress and resultant stress on oblique plane	16	35%
			14/9/23	3.1 Determination of normal stress, shear stress and resultant stress on oblique plane		
			21/9/23	3.3 Location of principal plane and computation of principal stress		
			23/9/23	Maximum shear stress using Mohr's circle		
			25/9/23	Maximum shear stress using Mohr's circle		
			26/9/23	Simple problems on above		
			27/9/23	Simple problems on above		
			28/9/23	Simple problems on above		
		CH-4	30/9/23	4.1 Types of beam and load		
3	Oct-23	CH-4	3/10/2023	4.2 Concepts of Shear force and bending moment	9	17%
			4/10/2023	4.3 Shear Force and Bending moment diagram and its salient features illustration in cantilever beam		
			5/10/2023	4.3 Shear Force and Bending moment diagram and its salient features illustration in cantilever beam		
			7/10/2023	simply supported beam and over hanging beam under point load and uniformly distributed load		
			9/10/2023	simply supported beam and over hanging beam under point load and uniformly distributed load		
			10/10/2023	simply supported beam and over hanging beam under point load and uniformly distributed load		
			11/10/2023	simply supported beam and over hanging beam under point load and uniformly distributed load		
			12/10/2023	Simple problems on above		
			31/10/23	Simple problems on above		
			4	Nov-23		
2/11/2023	Simple problems on above					
CH-5	4/11/2023	5.1 Assumptions in the theory of bending				
	6/11/2023	5.2 Bending equation, Moment of resistance				
	7/11/2023	5.2 Bending equation, Moment of resistance				
	8/11/2023	Section modulus & neutral axis				
	9/11/2023	5.3 Solve simple problems				
CH-6	13/11/23	Define column				
	14/11/23	6.2 Eccentric load on column				
	15/11/23	Eccentric load on column				
	16/11/23	Solve simple problems				
			18/11/23	Solve simple problems		

BRIEF SUMMARY OF THE PLAN

SL. NO.	MONTH	UNIT/CHAPTER TO BE COVERED	% COVERAGE
1	AUGUST	ch-1, ch-2	30%
2	SEPTEMBER	ch-3, ch-4	30%
3	OCTOBER	ch-5	17%
4	NOVEMBER	ch-6	23%


signature of Teacher
3/8/23


signature of HOD
3/8/23


signature of Principal
3/8/23