

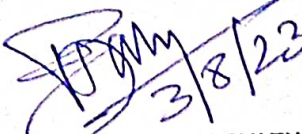
LESSON PLAN

SESSION		SUMMER 2023				
SEMESTER		4TH				
BRANCH		MECHANICAL ENGINEERING				
SECTION		A&B				
THEORY NO.		1				
SUBJECT		THEORY OF MACHINE				
LECTURER		Er. RAJEEB LOCHAN DASH & Er ABHIJIT MOHANTY				
SL NO.	MONTH	CHAPTER NO.	DATE	TOPICS TO BE COVERED	NO. OF ACADEMIC DAYS AVAILABLE FOR THE SUBJECT	% COVERED
1	Feb-23	1	23.2.23	Simple mechanism	5	9%
			24.2.23	1.1 Link ,kinematic chain, mechanism, machine		
			25.2.23	1.2 Inversion, four bar link mechanism and its inversion		
			27.2.23	1.2 Inversion, four bar link mechanism and its inversion		
			28.2.23	1.3 Lower pair and higher pair		
2	Mar-23	2	1.3.23	1.4 Cam and followers	24	43%
			2.3.23	2.1 Friction between nut and screw for square thread, screw jack		
			3.3.23	2.1 Friction between nut and screw for square thread, screw jack		
			4.3.23	2.1 Friction between nut and screw for square thread, screw jack		
			6.3.23	PROBLEMS		
			9.3.23	PROBLEMS		
			10.3.23	PROBLEMS		
			11.3.23	PROBLEMS		
			13.3.23	2.2 Bearing and its classification, Description of roller, needle roller& ball bearings.		
			14.3.23	2.2 Bearing and its classification, Description of roller, needle roller& ball bearings.		
			15.3.23	2.3 Torque transmission in flat pivot& conical pivot bearings.		
			16.3.23	2.3 Torque transmission in flat pivot& conical pivot bearings.		
			17.3.23	PROBLEMS		
			18.3.23	PROBLEMS		
			20.3.23	PROBLEMS		
21.3.23	2.4 Flat collar bearing of single and multiple types.					
22.3.23	2.5 Torque transmission for single and multiple clutches					
23.3.23	2.5 Torque transmission for single and multiple clutches					

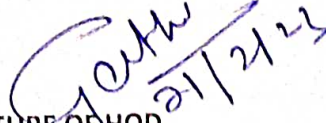
2	Mar-23	2	24.3.23	2.6 Working of simple frictional brakes.	24	43%
			25.3.23	PROBLEMS		
			27.3.23	PROBLEMS		
			28.3.23	2.6 Working of simple frictional brakes.		
		3	29.3.23	Concept of power transmission.types of belt,gear,chain drive		
31.3.23	3.3 Computation of velocity ratio, length of belts (open and cross)with and without slip.					
3	Apr-23	3	3.4.23	cross)with and without slip.	15	27%
			4.4.23	3.4 Ratio of belt tensions, centrifugal tension and initial tension.		
			5.4.23	3.4 Ratio of belt tensions, centrifugal tension and initial tension.		
			6.4.23	3.5 Power transmitted by the belt.		
			8.4.23	3.6 Determine belt thickness and width		
			10.4.23	3.7 V-belts and V-belts pulleys3.8 Concept of crowning of pulleys.		
			11.4.23	3.9 Gear drives and its terminology.		
			12.4.23	3.10 Gear trains, working principle of simple, compound, reverted and		
			13.4.23	epicyclic gear trains.		
		4	24.4.23	4.1 function of governor 4.2Classification of governor		
			25.4.23	4.3 Working of Watt, Porter, Proel and Hartnell governors.		
			26.4.23	4.3 Working of Watt, Porter, Proel and Hartnell governors.		
			27.4.23	4.4 Conceptual explanation of sensitivity, stability and isochronisms.		
			28.4.23	4.5 Function of flywheel.		
			29.4.23	4.6 Comparison between flywheel &governor.		
4	May-23	4	1.5.23	4.7 Fluctuation of energy and coefficient of fluctuation of speed.	11	21%
			5	2.5.23		
		3.5.23		5.2 Static balancing of rotating parts.5.3Principles of balancing of reciprocating parts.		
		4.5.23		5.4 Causes and effect of unbalance.		
		6	6.5.23	5.5 Difference between static and dynamic balancing		
			8.5.23	6.1 Introduction to Vibration and related terms (Amplitude, time period and frequency, cycle)		
			9.5.23	6.2 Classification of vibration.		
			10.5.23	6.3 Basic concept of natural, forced & damped vibration		
			11.5.23	6.4 Torsional and Longitudinal vibration.		
			12.5.23	REVISION		
		13.5.23	REVISION			

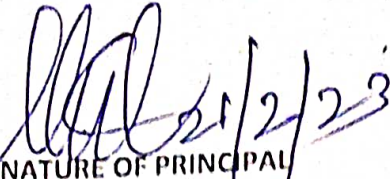
BRIEF SUMMARY OF THE PLAN

SL. NO.	MONTH	UNIT/CHAPTER TO BE COVERED	% COVERAGE
1	Feb-23	CH-1	9%
2	Mar-23	CH-1, CH-2 & CH-3	43%
3	Apr-23	CH-3 & CH-4	27%
4	May-23	CH-4, CH-5 & CH-6	21%


SIGNATURE OF FACULTY

A. Mohanty
03/08/23


SIGNATURE OF HOD


SIGNATURE OF PRINCIPAL