

LESSON PLAN.							
Academic Session :- SUMMER 2024							
Subject :- Theory of Machine , Subject code - Th-1 W.E.F : 16/01/24						Total Period :- 60 per Sem	
Teacher :- SHUBHASINI MUDULI (GF, MECHANICAL ENGINEERING DEPT.)						Theory :- 4p/week	
						SEMESTER:-4th	
MONTH	Week	Class Day	Syllabus to be covered	Syllabus actually	Short fall	Signature	
J A N U A R Y	1st	1st	1.0 Simple mechanism 1.1 Link ,kinematic chain, mechanism, machine				
		2nd	1.2 Inversion, four bar link mechanism and its inversion				
		3rd	1.3 Lower pair and higher pair				
		4th	1.4 Cam and followers				
	2nd	1st	2.0 Friction 2.1 Friction between nut and screw for square thread, screw				
		2nd	2.2 Bearing and its classification, Description of roller, needle roller& ball bearings.				
		3rd	2.3 Torque transmission in flat pivot& conical pivot bearings.				
		4th	2.4 Flat collar bearing of single and multiple types.				
	3rd	1st	2.5 Torque transmission for single and multiple clutches				
		2nd	2.6 Working of simple frictional brakes.				
		3rd	2.7 Working of Absorption type of dynamometer				
		4th	3.0 Power Transmission 3.1 Concept of power transmission				
F E B R U A R Y	4th	1st	3.2 Type of drives, belt, gear and chain drive.				
		2nd	3.3 Computation of velocity ratio, length of belts (open and cross)with and without slip.				
		3rd	3.4 Ratio of belt tensions, centrifugal tension and initial tension.				
		4th	3.5 Power transmitted by the belt.				
	5th	1st	3.6 Determine belt thickness and width for given permissible stress for open and crossed belt considering centrifugal tension.				
		2nd	3.7 V-belts and V-belts pulleys				
		3rd	3.8 Concept of crowning of pulleys.				
		4th	3.9 Gear drives and its terminology.				
	6th	1st	3.10 Gear trains, working principle of simple, compound, reverted and epicyclic gear trains.				
		2nd	4.0 Governors and Flywheel 4.1 Function of governor				
		3rd	4.2 Classification of governor				
		4th	4.3 Working of Watt, Porter, Proel and Hartnell governors.				
	7th	1st	4.4 Conceptual explanation of sensitivity, stability and isochronisms.				
		2nd	4.5 Function of flywheel.				
		3rd	4.6 Comparison between flywheel &governor				
		4th	4.7 Fluctuation of energy and coefficient of fluctuation of speed				
	8th	1st	5.0 Balancing of Machine 5.1 Concept of static and dynamic balancing.				
		2nd	5.2 Static balancing of rotating parts.				
		3rd	5.2 Static balancing of rotating parts.				
		4th	5.3 Principles of balancing of reciprocating parts				
M A R C H	9th	1st	5.4 Causes and effect of unbalance.				
		2nd	5.4 Causes and effect of unbalance.				
		3rd	5.5 Difference between static and dynamic balancing				
		4th	5.5 Difference between static and dynamic balancing				
	10th	1st	6.0 Vibration of machine parts				
		2nd	6.0 Vibration of machine parts				
		3rd	6.1 Introduction to Vibration and related terms (Amplitude, time period and				
		4th	6.1 Introduction to Vibration and related terms (Amplitude, time period and				
	11th	1st	6.2 Classification of vibration.				
		2nd	6.2 Classification of vibration.				
		3rd	6.3 Basic concept of natural, forced & damped vibration				
		4th	6.3 Basic concept of natural, forced & damped vibration				
	12th	1st	6.3 Basic concept of natural, forced & damped vibration				
		2nd	6.3 Basic concept of natural, forced & damped vibration				
		3rd	6.3 Basic concept of natural, forced & damped vibration				
		4th	6.3 Basic concept of natural, forced & damped vibration				
	13th	1st	6.4 Torsional and Longitudinal vibration				
		2nd	6.4 Torsional and Longitudinal vibration				
		3rd	6.4 Torsional and Longitudinal vibration				
		4th	6.5 Causes & remedies of vibration				
		1st	6.5 Causes & remedies of vibration				

P R I L	17th	3rd	6.5 Causes & remedies of vibration			
		4th	6.5 Causes & remedies of vibration			
	15th	1st	REVISION			
		2nd	REVISION			
		3rd	REVISION			
		4th	REVISION			

Subhasini Modali