

Lesson Plan

Name of the Faculty : SH. Vijay Dahiya
 Discipline : Mechanical Engg.
 Semester : 5th
 Subject : T.O.M.
 Lesson plan duration : 15 weeks (from September, 2023 to December, 2023)

Week	Theory	
	Lecture Day	Topic (including assignments /tests)
Week 1	1 st	Simple Mechanisms: Introduction to link, kinematic pair,
	2 nd	lower and higher pair
	3 rd	Kinematic chain
Week 2	1 st	Mechanism
	2 nd	Inversions of Mechanism
	3 rd	Different types of mechanisms
Week 3	1 st	Examples
	2 nd	Revision & Assignment
	3 rd	Power Transmission: Introduction to Belt and Rope drives
Week 4	1 st	Types of belt drives
	2 nd	Types of pulleys
	3 rd	Velocity ratio, slip and creep
Week 5	1 st	Crowning of pulleys (Simple Numerical)
	2 nd	Flat and V belt drive
	3 rd	Ratio of driving tensions, power transmitted, centrifugal tension,
Week 6	1 st	Condition for maximum horse power
	2 nd	Different types of chains and their terminology
	3 rd	Gear terminology
Week 7	1 st	Types of gears and their applications
	2 nd	Simple and compound gear trains
	3 rd	Power transmitted by simple spur gear
Week 8	1 st	Simple Numerical Practice
	2 nd	Assignment & Revision
	3 rd	Test
Week 9	1 st	Flywheel: Principle and applications of flywheel
	2 nd	Turning - moment diagram of flywheel for different engines
	3 rd	Fluctuation of speed
Week 10	1 st	Fluctuation of energy
	2 nd	Coefficient of fluctuation of speed
	3 rd	Coefficient of fluctuation of energy

Week 11	1 st	Simple numerical problems on fluctuation of speed and fluctuation of energy
	2 nd	Turning Moment Diagram for flywheel
	3 rd	Assignment & Revision
Week 12	1 st	Test
	2 nd	Governor: Principal of governor
	3 rd	Watt Governor
Week 13	1 st	Porter Governor, Hartnel governor
	2 nd	Numerical based on watt governor
	3 rd	Hunting, Isochronism, Stability, Sensitiveness of a governor
Week 14	1 st	Balancing: Concept of balancing, Introduction to balancing of rotating masses
	2 nd	simple numerical
	3 rd	several masses rotating in different planes
Week 15	3 rd	Vibrations: Concept of vibrations, longitudinal, transverse and torsional vibrations
	1 st	Damping of vibrations, Causes of vibrations in machines
	2 nd	Harmful Effects of Vibrations
	3 rd	Remedies to curb vibrations