

LESSON PLAN

Subject Name- Theory of Machine	Branch- Production Engineering
Subject Code- BPE2402	Semester- 4th

S/N	Module	Topic(s)	Period/ Hours
1.	I	Mechanism: Basic Kinematic concepts and definitions	1
2.	I	Mechanism, link, kinematic pair, classification of kinematic pairs, degree of freedom, kinematic chain	2-3
3.	I	Binary ternary and quaternary joints and links	4-5
4.	I	Tutorial	6
5.	I	Degrees of freedom for plane mechanism, grubler's equation	7
6.	I	Inversion of mechanism, four bar chains and their inversions	8
7.	I	Single slider crank chain, double slider crank chain and their inversion.	9
8.	I	Tutorial	10
9.	II	Friction of a screw and nut, square threaded screw, V-threaded screw, pivot and collar	11-13
10.	II	Friction circle, friction axis	14
11.	II	Friction clutches, transmission of power by single plate	15
12.	II	Multi plate and cone clutches	16
13.	II	Gear trains: simple train, compound train, reverted train, epicyclic train and their application	17-19
14.	II	Tutorial	20
15.	III	Toothed gears: Theory of shape and action of tooth properties methods of generation of standard Tooth profiles	21-22
16.	III	Standard proportions	23

S/N	Module	Topic(s)	Period/ Hours
17.	III	Interference and Under-cutting, methods of Eliminating Interference, Minimum numbers of teeth to avoid interference	24-26
18.	IV	Governors: Centrifugal Governors-watt and Porter Governors	27
19.	IV	Spring loaded Governor-Hartnell Governor	28
20.	IV	Sensitiveness, stability, Isochronism ,Hunting	29
21.	IV	Governor effort and power, curves of controlling force	30
22.	IV	Tutorial	31