Government Polytechnic, Tikarpada || Lesson Plan

Discipline : MECHANICAL ENGG.		Semester: 5th Sem	Name of the Teaching Faculty : D. Jena
Subject :Mechatronics		No. of Days / per week class allotted : 02	Semester From date : 15.09.2022 To Date : 22.12.2022
MONTH	**Week**	**Day**	**Topics**
SEPTEMBER	4th	1st	1.0 INTRODUCTION TO MECHATRONICS
		2nd	1.1 Definition of Mechatronics 1.2 Advantages & disadvantages of Mechatronics
	5th	1st	1.3 Application of Mechatronics
		2nd	1.4 Scope of Mechatronics in Industrial Sector 1.5 Components of a Mechatronics
OCTOBER	3rd	1st	1.6 Importance of mechatronics in automation
		2nd	3.1Mechanical Actuators
	4th	1st	3.1.1 Machine, Kinematic Link, Kinematic Pair
		2nd	3.1.2 Mechanism, Slider crank Mechanism
	5th	1st	3.1.3 Gear Drive, Spur gear, Bevel gear, Helical gear, worm gear
NOVEMBER	1st	2nd	3.1.4 Belt & Belt drive
	2nd	1st	3.1.5 Bearings
	3rd	1st	5.1 Introduction to Numerical Control of machines and CAD/CAM
		2nd	5.1.1 NC machines 5.1.2 CNC machines
	4th	1st	5.1.3.CAD/CAM
		2nd	5.1.3.3 Software and hardware for CAD/CAM 5.1.3.4 Functioning of CAD/CAM system
	5th	1st	5.1.3.4 Features and characteristics of CAD/CAM system 5.1.3.5 Application areas for CAD/CAM
		2nd	5.2 elements of CNC machines 5.2.1 Introduction
DECEMBER	1st	2nd	5.2.2 Machine Structure 5.2.3 Guideways/Slide ways 5.2.3.1 Introduction and Types of Guideways 5.2.3.2 Factors of design of guideways
	2nd	1st	5.2.4 Drives 5.2.4.1 Spindle drives 5.2.4.2 Feed drive 5.2.5 Spindle and Spindle Bearings
		2nd	6.0 ROBOTICS 6.1 Definition, Function and laws of robotics
	3rd	1st	6.2Types of industrial robots 6.3 Robotic systems
		2nd	6.3 Robotic systems 6.4 Advantages and Disadvantages of robots
	4th	1st	Previous year question paper discussion-2020
		2nd	Previous year question paper discussion-2021