

Discipline:- Mechanical Engg.	Semester:5th	Name of the Teaching Faculty:- Er .Samir kumar Panda & Er. Ramakanta Nayak
Subject:- Mechatronics	No. Of days/week class allotted - 04	Semester from 15.09.2022 to 22.12.2022
		No. Of weeks:- 15
Week	No. Of Period	Theory Topics
15.09.2022 To 17.09.2022	1 st	Definition of Mechatronics
19.09.2022 To 24.09.2022	1 st	Advantages & disadvantages of Mechatronics
	2 nd	Application of Mechatronics
	3 rd	Scope of Mechatronics in Industrial Sector
	4 th	Components of a Mechatronics System
26.09.2022 To 01.10.2022	1 st	Importance of mechatronics in automation
	2 nd	Defination of Transducers
	3 rd	Classification of Transducers
	4 th	Electromechanical Transducers
03.10.2022 To 08.10.2022	1 st	DURGA PUJA HOLIDAYS
	2 nd	
	3 rd	
	4 th	
10.10.2022 To 15.10.2022	1 st	Transducers Actuating Mechanisms
	2 nd	Displacement & Positions Sensors
	3 rd	Velocity, motion, force and pressure sensors.
	4 th	Mechanical Actuators , Machine, Kinematic Link, Kinematic Pair
17.10.2022 To 22.10.2022	1 st	Mechanism, Slider crank Mechanism
	2 nd	Gear Drive, Spur gear, Bevel gear, Helical gear, worm gear
	3 rd	Belt & Belt drive
	4 th	Bearings

Week	No. Of period	Theory Topics
24.10.2022 To 29.10.2022	1 st	Diwali
	2 nd	Electrical Actuator , Switches and relay
	3 rd	Solenoid D.C Motors
	4 th	A.C Motors
31.10.2022 To 05.11.2022	1 st	Stepper Motors , Specification and control of stepper motor
	2 nd	Servo Motors D.C & A.C
	3 rd	Work done during a non- flow process.
	4 th	Revision
07.11.2022 To 12.11.2022	1 st	Last Monday of Kartika Purnima
	2 nd	Kartika purnima
	3 rd	Programmable logic controllers introduction
	4 th	Advantages of PLC
14.11.2022 To 19.11.2022	1 st	Selection and uses of PLC
	2 nd	Architecture basic internal structures
	3 rd	Prathama Ashtami
	4 th	Input/output Processing and Programming Mnemonics
21.11.2022 To 26.11.2022	1 st	Master and Jump Controllers
	2 nd	Revision
	3 rd	Introduction to Numerical Control of machine
	4 th	CNC machines ,CAD/CAM , CAD ,CAM .
28.11.2022 To 3.12.2022	1 st	Software and hardware for CAD/CAM
	2 nd	Functioning of CAD/CAM system
	3 rd	Features and characteristics of CAD/CAM system
	4 th	Application areas for CAD/CAM

Week	No.of period	Theory Topics
5.12.2022 To 10.12.2022	1 st	Revision of the chapter
	2 nd	elements of CNC machine, Introduction
	3 rd	Last Thursday of margasira
	4 th	Introduction Machine Structure
12.12.2022 To 17.12.2022	1 st	Introduction Guideways/Slide ways
	2 nd	Types of Guideways
	3 rd	Factors of design of guideways
	4 th	Spindle drives
19.12.2022 To 24.12.2022	1 st	Feed drive
	2 nd	Spindle and Spindle Bearings
	3 rd	Revision of the chapter and discuss previous year question