

LESSON PLAN - WINTER 2023
SWAMI VIVEKANANDA SCHOOL OF ENGINEERING & TECHNOLOGY, BBSR

DISCIPLINE- MECHANICAL	SEMESTER-5TH	NAME OF THE FACULTY: ER. Babuli Kumar Jena
SUBJECT- MECHATRONICS	NO. OF CLASS ALLOTTED/ PER WEEK-5	SEM. From date: 01.08.2023 TO 30.11.2023 No of weeks:19TH
WEEK	CLASS DAY	THEORY TOPIC
1ST	1.08.2023	Introduction to Mechatronics
	2.08.2023	Defination of Mechatronics, Application of Mechatronics
	3.08.2023	Advantages and disadvantages of Mechatronics
	4.08.2023	Importance of mechatronics in automation
	5.08.2023	Scope of Mechatronics in Industrial sector
2ND	7.08.2023	Components of Mechatronics
	9.08.2023	Components of Mechatronics
	10.08.2023	Importance of Mechatronics in Automation
	11.08.2023	Transducers
3RD	14.08.2023	Classifiaction of transducers
	16.08.2023	Electromechanical Tranducers
	18.08.2023	Transducers Actuating Mechanism
4TH	21.08.2023	Displacement and position sensors
	22.08.2023	Velocity and Motion sensors
	24.08.2023	Force and Pressure Sensors
	25.08.2023	Temperature sensors, Light Sensors
5TH	28.08.2023	Actuators
	29.08.2023	Mechanical Actuators (Machine, Kinematic Link, Kinematic
	30.08.2023	Mechanical Actuators (Machine, Kinematic Link, Kinematic
6TH	1.09.2023	Mechanism of Mechanical Actuators
7TH	4.09.2023	Slide Crank Mechanism
	5.09.2023	Gear Drive
	8.09.2023	Spur Gear
	9.09.2023	Bevel Gear
8TH	11.09.2023	Helical Gear
	12.09.2023	Worm Gear
	13.09.2023	Revision Work
	14.09.2023	Belt & Belt Drive
	15.09.2023	Bearings
9TH	18.09.2023	Monthly Test
	21.09.2023	Electrical Actuator, Switches and relays
	22.09.2023	Solenoid
	23.09.2023	D.C Motors, A.C Motors
10TH	25.09.2023	Specification and control of Stepper Motors
	29.09.2023	Servo Motors D.C and A.C
11TH	3.10.2023	PLC Introduction
	5.10.2023	Advantages of PLC

12TH	9.10.2023	Selection of PLC, Architecture basic internal structures
	11.10.2023	Internal Assessment
	13.10.2023	Input/ output Processing and Programming
13TH	17.10.2023	Mnemonics
	19.10.2023	Master and Jump controllers
14TH	28.10.2023	Introduction to Numerical Control Machine and CAD/CAM
15TH	3.11.2023	NC Machine, CNC Machine
16TH	6.11.2023	CAD and CAM
	8.11.2023	Software and Hardware for CAD/CAM
	10.11.2023	Functioning of CAD/CAM System
17TH	14.11.2023	Features and characteristics of CAD/CAM system
	16.11.2023	Application areas of CAD/CAM
	18.11.2023	CNC Introduction, Machine structure
18TH	22.11.2023	Guideways/Slideways
	24.11.2023	Factors of design of guideways
	25.11.2023	Drives: Spindle drives, Feed Drive
19TH	27.11.2023	Spindle and Spindle bearings
	29.11.2023	Robotics, Function and laws of robotics
	30.11.2023	Types of Industrial robots, advantages and disadvantages of
HOD SIGN H.O.D		

Mechanical Engineering
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