

LESSON PLAN -2022
SWAMI VIVEKANANDA SC HOOL OF ENGINEERING & TECHNOLOGY, BBSR

DISCIPLINE- MECHANICAL	SEMESTER-5TH	NAME OF THE FACULTY: ER. ABHIJIT CHANDA
SUBJECT- MECHATRONICS	NO. OF CLASS ALLOTTED/ PER WEEK-5	SEM. From date: 15.9.2022 TO 22.12.2022 No of weeks:11TH
WEEK	CLASS DAY	THEORY TOPIC
1ST WEEK	15.09.2022	Introduction to Mechatronics, Definition of mechatronic
	16.09.2022	Advantages & disadvantages of Mechatronics, Application of Mechatronics
	17.09.2022	Scope of Mechatronics in Industrial sector, Components of a
2ND WEEK	19.09.2022	Importance of mechatronics in automation
	20.09.2022	Assignments
	21.09.2022	Defination of Transdures, classification of Transducers
	22.09.2022	Electromechanical Transducers, Transducers Actuating Mechanisms
	23.09.2022	Displacement & position sensors, velocity, motion, force & ressure sensors
3RD WEEK	26.09.2022	Temperature and light sensors
	27.09.2022	Assignments
	28.09.2022	Mechanical Actuators, machine, kinematic link, kinematic pair
	29.09.2022	Mechanism, slider crank mechanism
	30.09.2022	DO
4TH WEEK	06.10.2022	Gear Drive, Spur gear, Bevel gear
	07.10.2022	Helical gear, worm gear
5TH WEEK	10.10.2022	Belt & Belt drive, Bearing
	11.10.2022	Electrical Actuator, switches and relay, Solenoid
	12.10.2022	D.C Motors, A.C Motors
	13.10.2022	Stepper Motors, specification and control stepper motors
	14.10.2022	Servo Motors D.C & A.C
	15.10.2022	Assignments
6TH WEEK	17.10.2022	Explain Programmable Logic Controllers(PLC)
	18.10.2022	Advantages of PLC, Slection and uses of PLC
	19.10.2022	Architecture basic internal structures
	20.10.2022	Input/ output Processing and Programming
	21.10.2022	Mnemonics, Master and Jump Controllers
7TH WEEK	26.10.2022	Assignments
	27.10.2022	Explain Elements of CNC Machines
	28.10.2022	Introduction to Numerical Control of machines and CAD/CAM
	29.10.2022	NC Machines, CNC Machines
	31.10.2022	CAD/CAM, Software and hardware for CAD/CAM
8TH WEEK	01.11.2022	Functioning of CAD/CAM system
	02.11.2022	Features and characteristics of CAD/CAM system

9TH WEEK	10.11.2022	Machine Structure
	16.11.2022	Introduction and types of Guideways
	24.11.2022	Factors of design of guideways
	30.11.2022	Spindle and Spindle Bearings
10TH WEEK	02.12.2022	Assignments
	06.12.2022	Definition, Function and law of robotics
11TH WEEK	20.12.2022	Types of Industrial robots
	22.12.2022	Robotic system, Advantages and Disadvantages of robots