LESSON PLAN.
5th SEMESTER   W.E.F-19/9/2022   Total Period :- 60
SUBJECT-MECHATRONICS (Sub code-TH4)   Theory periods: 4 P/WEAKLY
Teacher :- CHANDRASEKHAR DASH (PTGF, MECHANICAL ENGINEERING DEPT.)

SL NO	MONTH	Week	Date	UNIT NO/PERIOD ALLOTED	Topic to be covered as per Syllabus	Topic actually covered as per Syllabus	Short fall if any/syllabus	remarks
1	SEPT	4TH	19-Sep-22	5	UNIT-1 Definition of Mechatronics	covered	Nill	
2			20-Sep-22		Advantages & disadvantages of Mechatronics, Application of Mechatronics	covered	Nill	
3			21-Sep-22		Scope of Mechatronics in Industrial Sector	covered	Nill	
4			23-Sep-22		Components of a Mechatronics System	covered	Nill	
5		5TH	26-Sep-22		Importance of mechatronics in automation	covered	Nill	
6			27-Sep-22		UNIT-2 Defination of Transducers	covered	Nill	
7			28-Sep-22		Classification of Transducers	covered	Nill	
8			30-Sep-22		Electromechanical Transducers	covered	Nill	
9	OCT	3RD	10-Sep-22	10	Transducers Actuating Mechanisms	covered	Nill	
10			11-Sep-22		Displacement &Positions Sensors	covered	Nill	
11			12-Sep-22		Velocity, motion Sensors	covered	Nill	
12			14-Oct-22		force and pressure sensors	covered	Nill	
13		4TH	17-Oct-22		Temperature sensors	covered	Nill	
14			18-Oct-22		light sensors.	covered	Nill	
15			19-Oct-22		Temperature and light sensors.	covered	Nill	
16			21-Oct-22		UNIT-3 Mechanical Actuators, Machine, Kinematic Link, Kinematic Pair	covered	Nill	
17		5TH	24-Oct-22		Mechanism, Slider crank Mechanism	covered	Nill	
18			25-Oct-22		Gear Drive, Spur gear, Bevel gear, Helical gear, worm gear	covered	Nill	
20			26-Oct-22		Belt & Belt drive , Bearing	covered	Nill	
21			28-Oct-22	10	Electrical Actuator, Switches and relay	covered	Nill	
22			31-Oct-22		Solenoid	covered	Nill	
23	NOV	1ST	1-Nov-22		D.C Motors, A.C motors	covered	Nill	
24			2-Nov-22		Stepper Motors	covered	Nill	
25			4-Nov-11		Specification and control of stepper motors	covered	Nill	
26		2ND	7-Nov-22		Servo Motors D.C & A.C	covered	Nill	
27			8-Nov-22		UNIT-4 PROGRAMMABLE LOGIC CONTROLLERS(PLC)	covered	Nill	
28			9-Nov-22		Introduction	covered	Nill	
29			11-Nov-22		Advantages of PLC	covered	Nill	
30		3RD	14-Nov-22		Selection and uses of PLC	covered	Nill	
31			15-Nov-22		Selection and uses of PLC	covered	Nill	
32			16-Nov-22		Architecture basic internal structures	covered	Nill	
33			18-Nov-22		Architecture basic internal structures	covered	Nill	
34		4TH	21-Nov-22	15	Input/output Processing and Programming	covered	Nill	
35			22-Nov-22		Input/output Processing and Programming	covered	Nill	
36			23-Nov-22		Input/output Processing and Programming	covered	Nill	
37			25-Nov-22		Mnemonics	covered	Nill	

#	Month	Week	Date	Topic			
38		5TH	28-Nov-22	Mnemonics	covered	Nill	
39			29-Nov-22	Master and Jump Controllers	covered	Nill	
40			30-Nov-22	Master and Jump Controllers	covered	Nill	
41		1ST	2-Dec-22	Master and Jump Controllers	covered	Nill	
42		2ND	5-Dec-22	UNIT-5 Introduction to Numerical Control of machines and CAD/CAM			
43			6-Dec-22	NC machines, CNC machines			
44			7-Dec-22	Software and hardware for CAD/CAM			
45			9-Dec-22	Functioning of CAD/CAM system			
		3RD	12-Dec-22	Application areas for CAD/CAM			
46	DEC		13-Dec-22	Features and characteristics of CAD/CAM system,			
47			14-Dec-22	elements of CNC machines			
48			16-Dec-22	Machine Structure			
49		4TH	19-Dec-22	Introduction and Types of Guideways			
50			20-Dec-22	2 Factors of design of guideway			
51			21-Dec-22	Drives			
52			23-Dec-22	Spindle drives			
53		5TH	26-Dec-22	Feed drive			
54			27-Dec-22	Spindle and Spindle Bearings			
55			28-Dec-22	Spindle and Spindle Bearings			
57			30-Dec-22	UNIT-6 Definition, Function and laws of robotics			
58		1ST	2-Jan-23	Types of industrial robots			
59			3-Jan-22	Robotic systems			
			4-Jan-22	Robotic systems			
60	JAN		6-Jan-22	Advantages and Disadvantages of robots			
		2ND	9-Jan-22	Revision			
			10-Jan-22	Revision			
			11-Jan-22	Revision			

(Note: "15" appears spanning the Dec UNIT-5/guideways section, and "5" appears spanning the Jan robotics section.)

Chandrasekhar Dash