

LESSON PLAN WINTER-2021

SUBJECT- MECHATRONICS SEM-5th BRANCH- MECHANICAL ENGG.

SL NO	DATE	CHAPTER	TOPIC NAME	NO OF PERIODS
1	05.10.21	1.0 INTRODUCTION TO MECHATRONICS	1.1 Definition of Mechatronics	1
2	07.10.21		1.2 Advantages & disadvantages of Mechatronics	1
3	09.10.21		1.3 Application of Mechatronics	1
	12.10.21		CONTINUE	1
4	21.10.21		1.4 Scope of Mechatronics in Industrial Sector	1
5	23.10.21		1.5 Components of a Mechatronics System	1
6	26.10.21		1.6 Importance of mechatronics in automation	1
7	27.10.21	2.0 SENSORS AND TRANSDUCERS	2.1 Definition of Transducers	1
8	28.10.21		2.2 Classification of Transducers	1
9	30.10.21		2.3 Electromechanical Transducers	1
10	02.11.21		2.4 Transducers Actuating Mechanisms	1
11	03.11.21		2.5 Displacement & Positions Sensors	1
	04.11.21		CONTINUE	
12	06.11.21		2.6 Velocity, motion, force and pressure sensors	1
13	09.11.21	3.0 ACTUATORS-MECHANICAL, ELECTRICAL	2.7 Temperature and light sensors.	1
14	10.11.21		3.1 Mechanical Actuators	1
15	11.11.21		Machine, Kinematic Link, Kinematic Pair	1
16	13.11.21		Mechanism, Slider crank Mechanism	1
17	16.11.21		Gear Drive, Spur gear, Bevel gear, Helical gear, worm gear	1
18	17.11.21		3.1.1 Machine, Kinematic Link, Kinematic Pair	1
19	18.11.21		Belt & Belt drive	1
20	20.11.21		Bearings	1
21	23.11.21		3.2 Electrical Actuator	1
22	24.11.21		3.2.1 Switches and relay 3.2.2 Solenoid	1
23	25.11.21		Specification and control of stepper motors	1
24	27.11.21		3.2.3 D.C Motors 3.2.4 A.C Motors	1
25	30.11.21		Stepper Motors Servo Motors D.C & A.C	1
26	01.12.21	4.0 PROGRAMMABLE LOGIC CONTROLLERS(PLC)	Introduction	1
27	02.12.21		CONTINUE	1
28	04.12.21		Advantages of PLC	1
29	07.12.21		CONTINUE	1
30	08.12.21		Selection and uses of PLC	1
31	09.12.21		CONTINUE	1
32	11.12.21		Architecture basic internal structures	1
33	14.12.21		CONTINUE	1
34	15.12.21		Input/output Processing	1
35	16.12.21		Input/output Programming	1
36	18.12.21		Mnemonic	1
37	21.12.21		CONTINUE	1
38	22.12.21		Master and Jump Controllers	1
39	24.12.21		CONTINUE	1
40	28.12.21		Introduction to Numerical Control of machines and CAD	1
41	29.12.21		5.1.1 NC machines	1

42	30.12.21	5.0 ELEMENTS OF CNC MACHINES	5.1.2 CNC machines	1
43	01.01.22		5.1.3.CAD/CAM	1
44	04.01.22		ices coefficient & the relation between the orifice coef	1
45	05.01.22		CONTINUE	1
46	06.01.22		5.2 elements of CNC machines	1
47	08.01.22		5.2.2 Machine Structure	1
48	11.01.22		5.2.3 Guideways/Slide ways	1
49	12.01.22		4 Drives5	1
50	13.01.22		4.1 Spindle drives	1
51	15.01.22		4.2 Feed drive	1
52	18.01.22		5.2.5 Spindle and Spindle Bearings	1
53	19.01.22		problems practice	1
54	20.01.22		6.0 ROBOTICS	6.1 Definition, Function and laws of robotics
55	22.01.22	6.2Types of industrial robots		1
56	25.01.22	6.3 Robotic systems		1
57	27.01.21	6.4 Advantages and Disadvantages of robots		1
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