Lesson Plan

Name of Faculty : Pooja Malik
Discipline : ECE
Semester : 6th sem
Subject : IA
Lesson Plan Duration : 14 weeks(from 6 March 2023 to june 2023)
Work Load (lecture/practical)per week (in hours) : Theory-03

Week	Theory	
	Lecture Day	Topic
1	1	Unit 1. Concept of PLC, Building blocks of PLC
	2	Functions of various blocks
	3	limitations of relays. Advantages of PLCs over electromagnetic relays
2	4	Different programming languages, PLC manufacturer
	5	Revision of chapter 1
	6	Unit 2 Basic operation and principles of PLC
3	7	Scan Cycle - Memory structures, I/O structure
	8	Programming terminal, power supply
	9	Revision of chapter 2
4	10	Assignment 1
	11	Revision of 1st sessional test
	12	1st sessional test
5	13	Unit 3. Basic instructions like latch, master control self holding relays.
	14	Timer instruction like retentive timers, resetting of timers
	15	Counter instructions like up counter, down counter, resetting of counters.
6	16	Arithmetic Instructions (ADD,SUB,DIV,MUL etc.) - MOV instructio
	17	RTC(Real Time Clock Function) - Watch Dog Timer
	18	Comparison instructions like equal, not equal, greater, greater than equal, less than, less than equal
7	19	Programming based on basic instructions, timer, counter, and comparison instructions using ladder program.
	20	Revision of chapter 3
	21	Unit 4. Concept of DCS
8	22	DCS I/O hardware
	23	Remote Terminal Unit
	24	Assignment 2
9	25	Revision of chapter 4
	26	Revision of 2nd sessional test
	27	2nd sessional test
10	28	Unit 5. Block Diagram of SCADA
	29	Difference between Open Architecture and Dedicated System
	30	Difference between DCS and SCADA
11	31	Unit 6. Introduction to electric drives
	32	AC Drive for Speed and Direction control
	33	Types of AC drives
12	34	Assignment 3
	35	Revision of chapter 6
	36	3rd sessional test
13	37	Revision of chapter 1,2,3
	38	Revision of chapter 4,5,6
	39	Revision of very short answer questions
14	40	Revision of short answer questions
	41	Revision of long answer questions
	42	Revision