Lesson Plan

Subject: PLC&M
Total No. of chapters :9
Branch : Electrical Engineering

Semester : 6th
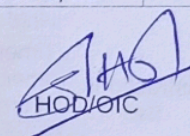Lecture Planned :61

Lecture SN	Unit	Topic	Day & Date	Remarks
1		Relays based logic circuits	Tue, Feb 14, 23	
2		limitations of relays based logic circuit	Wed, Feb 15, 23	
3	Introduction to PLC	Concept of PLC,Advantages of PLCs over electromagnetic relays based logic circuits	Thu, Feb 16, 23	
4		Different programming languages used in PLC	Mon, Feb 20, 23	
5		Review of 1st Chapter	Tue, Feb 21, 23	
6		Basic operation of PLC	Wed, Feb 22, 23	
7		principle of working of PLC	Thu, Feb 23, 23	
8		Architectural details of PLC	Mon, Feb 27, 23	
9		Input Modules in PLC	Tue, Feb 28, 23	
10	Architectural Detail and Working of PLC	Output Modules in PLC	Wed, Mar 1, 23	
11		Opto-isolation Circuit in PLC and its need	Thu, Mar 2, 23	
12		Memory structures in PLC	Mon, Mar 6, 23	
13		HMI (Human Machine Interface) used in PLC s	Tue, Mar 7, 23	
14		Power supply requirements in PLC	Thu, Mar 9, 23	
15		Review of 2nd Chapter	Mon, Mar 13, 23	
16		Review of 2nd Chapter	Tue, Mar 14, 23	
17		Addressing in PLC	Wed, Mar 15, 23	
18		I/O Address	Sat, Mar 18, 23	
19		Basic instructions: Examine ON, Examine OFF, Latch/Unlatch, Output Energize, Hold ON.	Mon, Mar 20, 23	
20	Instructions Set	Timer instructions: On delay timer, Off delay timer, retentive/non-retentive timers, resetting of timers	Tue, Mar 21, 23	
21		CLASS TEST-1	Wed, Mar 22, 23	
22		Counter instructions: Up Counter, Down Counter, resetting of Counters	Thu, Mar 23, 23	
23			Mon, Mar 27, 23	
24		Comparison instructions like equal, not equal, greater, greater than equal, less than, less than equal	Tue, Mar 28, 23	
25		Introduction to Ladder Logic programming,	Wed, Mar 29, 23	
26	Ladder Logic Programming	Ladder logic programming examples based on basic instructions	Mon, Apr 3, 23	
27		timer and counter instructions.	Tue, Apr 4, 23	
28		Ladder programs	Wed, Apr 5, 23	
29		Forward/reverse control of motor using PLC	Thu, Apr 6, 23	
30		Process Control (Stirred tank Heating Control)	Mon, Apr 10, 23	
31	Applications of PLCs	Car parking control	Tue, Apr 11, 23	
32		Doorbell operation	Wed, Apr 12, 23	
33		Traffic light control	Thu, Apr 13, 23	
34		Difference between Microprocessor & Microcontroller	Mon, Apr 17, 23	
35		Architectural Detail of 8051 microcontroller	Tue, Apr 18, 23	

36		CLASS TEST-2	Wed, Apr 19, 23	
37		Pin details of 8051 microcontroller	Thu, Apr 20, 23	
38	8051 Micro Controller	I/O Port Structure	Mon, Apr 24, 23	
39		Memory Organization in 8051	Tue, Apr 25, 23	
40		Special Function Registers	Wed, Apr 26, 23	
41		Instructions in 8051 Microcontroller	Thu, Apr 27, 23	
42		Addressing Modes in 8051 Microcontroller	Mon, May 1, 23	
43		Timer operation	Tue, May 2, 23	
44		Interrupts in 8051	Wed, May 3, 23	
45	Assembly language programming	Structure of Assembly Language	Thu, May 4, 23	
46		Assemblers and Compilers	Mon, May 8, 23	
47		Assembler Directives	Tue, May 9, 23	
48	Design and Interface using 8051 Microcontroller	Keypad interface	Wed, May 10, 23	
49		7- Segment interface	Thu, May 11, 23	
50		Stepper Motor interface	Thu, May 18, 23	
51		Review	Tue, May 23, 23	
52	Introduction to PIC Microcontroller and Arduino board	PIC microcontroller	Wed, May 24, 23	
53		Applications of PIC	Fri, May 26, 23	
54		Arduino	Mon, May 29, 23	
55		Application of Arduino	Tue, May 30, 23	
56		Review of syllabus	Wed, May 31, 23	
57		Review of syllabus	Thu, Jun 1, 23	
58		Review of syllabus	Mon, Jun 5, 23	
59		Review of syllabus	Tue, Jun 6, 23	
60		Review of syllabus	Wed, Jun 7, 23	
61		Review of syllabus	Thu, Jun 8, 23	

Subject Teacher:

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