

LESSON PLAN:-2024-2025

DISCIPLINE: ETC	SEMESTER: 6TH	NAME OF THE TEACHING FACULTY:- ANURAG SETHY
SUBJECT:-PLC & AUTOMATION LAB	NO.OF DAYS / PER WEEK :2	SEMESTER FROM DATE:- 04/02/2025 TO DATE: 17/05/2025 NO.OF WEEKS:-15
WEEK	CLASS DAY	PRACTICAL TOPICS
1ST	1ST	Introduction/Familiarization PLC Trainer & its Installation with PC ☐ Learn the basics and hardware components, configuration of PLC ☐ Study various building blocks of PLC ☐ Determine the No. of digital I/O & Analog I/O
	2ND	Students should learn Familiarization with PLC Trainer & its Installation with PC & note down the below observation ☐ Learn the basics and hardware components, configuration of PLC ☐ Study various building blocks of PLC ☐ Determine the No. of digital I/O & Analog I/O
2ND	1ST	Teach on implement a simple ladder logic program using digital inputs and outputs for PLC ☐ Test the AND,OR, EX-OR gate and EX-NOR gates.
	2ND	Student should perform ladder logic program using digital inputs and outputs for PLC & Test the AND,OR, EX-OR gate and EX-NOR gates & note down the observation
3RD	1ST	Learn to develop an application using timer
	2ND	Student should perform the ladder program on time pulse & note down the observation
4TH	1ST	Learn to develop an application using ON delay timer
	2ND	Student should perform the ladder program on ON delay timer & note down the observation
5TH	1ST	Learn to develop an application using OFF delay timer
	2ND	Student should perform the ladder program on OFF delay timer & note down the observation
6TH	1ST	Learn to Develop an application using Retentive and Non-Retentive Timers.
	2ND	Student should perform the ladder program on Retentive and Non-Retentive Timers & note down the observation
7TH	1ST	Learn to Develop an application using UP/DOWN counter
	2ND	Student should perform the ladder program on UP COUNTER & note down the observation
8TH	1ST	Student should perform the ladder program on DOWN COUNTER & note down the observation
	2ND	Learn to develop an application using Relays .
9TH	1ST	Student should perform the ladder program on Relays & note down the observation
	2ND	Learn to develop an application using Latches.
10TH	1ST	Student should perform the ladder program on Latches & note down the observation.
	2ND	Learn to implement a simple ladder logic program using counter with branching and sub routines with PLC.
11TH	1ST	Student should perform the ladder program on using counter with branching and sub routines with PLC. & note down the observation.
	2ND	Learn to implement a simple ladder logic program for interfacing a lift control with PLC
12TH	1ST	Write and implement a simple ladder logic program for interfacing a lift control with PLC & note down the observation.
	2ND	Hands On practice to implement the ladder logic program for interfacing a lift control with PLC & operate & note down the observation

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13TH	1ST	Learn to implement a simple ladder logic program for interfacing conveyor control with PLC..
	2ND	Write and implement a simple ladder logic program for interfacing a conveyor control with PLC
14TH	1ST	Hands On practice to implement a simple ladder logic program for interfacing a conveyor control with PLC operation & note down the observation
	2ND	Hands On practice to implement a simple ladder logic program for interfacing a conveyor control with PLC operation & note down the observation
15TH	1ST	Small project implementation by ladder logic & interface with PLC
	2ND	Practical Assesment

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