

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**DIPLOMA IN MECHATRONICS ENGINEERING**  
**SEMESTER: V**

Subject Name: **Programmable Logic Controller Practices**

**Laboratory Experiences:**

Sr. No.	Experiments
1.	Building blocks of PLC system
2.	Ladder diagram
3.	Different types of symbols used in ladder an F.B.D.
4.	Timer operations <ul style="list-style-type: none"><li>• On delay timer</li><li>• Off delay timer</li><li>• Retentive timer</li><li>• On delay with pulse on</li><li>• On delay with pulse off</li><li>• Off delay with pulse on</li><li>• Off delay with pulse off</li><li>• Flash timer</li></ul>
5.	Counter operations
6.	Memory for PLC
7.	Input - output system for architecture of PLC
8.	Demonstration of PLC
9.	PLC programming – 1 with the use of ladder diagram
10.	PLC Programming - 2 with the use of ladder diagram
11.	PLC Programming - 3 with the use of ladder diagram
12.	PLC Programming – 4 with the use of ladder diagram
13.	PLC Programming - 5 with the use of ladder diagram
14.	PLC Programming – 6 with the use of ladder diagram
15.	PLC Programming – 7 with the use of ladder diagram
16.	PLC Programming – 8 with the use of F.B.D.
17.	PLC Programming – 9 with the use of F.B.D.
18.	PLC Programming – 10 with the use of F.B.D.