

June 23,24, 2017

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

WORKSHOP REPORT ON PLC, HMI & SCADA

workshop on PLC & SCADA was organised by EEE department in association with FIRST LOGIC AUTOMATION Pvt Ltd. on 23rd and 24th June, 2017. This workshop was attended by 90 students of EEE department. First Logic Automation has been a training provider in India for over 12 years, successfully providing various training programs in PLC - SCADA - HMI - VFD - SERVO - DCS – PNEUMATICS & HYDRAULICS tools to optimize the use of their automation industry and make better informed decisions on future plans as part of the skill development which is very important in today's competitive world.

In this workshop, we came to know about the recent technologies in the market, and one of the most advanced technologies amongst all of them is PLC, HMI AND SCADA, which is used almost in every industry and even is used in metro, lifts and every other automated device.

PLC stands for programmable logic controller which is mainly used in automated systems. It is infact a advanced version of Microcontrollers which has timers and acts as a interface between machines and humans. It can be self modulated and can be edited as per the requirements. The input for a PLC is derived from the sensors. Ladder logic is mainly used to program PLC. It is of three types-



- Modular
- Compact
- Modular and Compact

Whereas SCADA refers to SUPERVISORY CONTROL AND DATA ACQUISITION, SCADA is a supervisory device which works for the better working of the machine and helps us to program and edit the plc as per our requirement.

For the purpose of designing, there are four steps-

- PLC
- SCADA
- HMI
- Variable frequency Drives system

Some of the information regarding SCADA was delivered in the workshop such as:

- Academicians/Students : Rs 250/-
- its features
- dynamic process graphics, security, trends, data base
- connectivity etc;
- its tags -string, analog, discrete etc;
- its brands –Wonder ware (Intouch), Siemens (WinCC),
- The programming for PLC was practiced by the students and working on SCADA software was also taught
- After this theory session, it was followed by a hands-on session where programs were made using the ladder logic and automated output of the program was observed.
- Overall, this workshop was knowledgeable and interactive and we got to know about the advancements in the Automation systems used.

