Reg. No. :

Question Paper Code: 31367

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2016

Elective

Electrical and Electronics Engineering

01UEE904 - PROGRAMMABLE LOGIC CONTROLLER AND SCADA

(Regulation 2013)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. Define PLC.

2. List out any four differences between PLC Vs personal computer.

3. What are the different types of PLC Languages?

4. Write short note ON-Delay timer.

5. Give the function of DAQ system.

6. Draw the evaluation of SCADA.

7. Mention the advantages of SCADA system.

8. Identify the seven layers of OSI model.

9. Distinguish between SCADA and PLC.

10. Give the PLC based speed control applications.

PART - B (5 x 16 = 80 Marks)

11. (a) Illustrate the overview of PLC in detail. (16)

Or

(b) Describe the operation of a typical input and output modules of PLC Systems. (16)

12. (a) Describe the robot controlling application in PLC with its neat algorithm, flow chart and ladder diagram. (16)

Or

(b) What is purpose of the move with mask instruction? Explain with an example. (16)

13. (a) Explain the SCADA architecture in detail with suitable diagram. (16)

Or

(b) Describe the Intelligent electronic devices in detail. (16)

14. (a) Draw and explain IEC 61850 layered architecture. (16)

Or

(b) Explain SCADA in energy Management system for large inter connected power system. (16)

15. (a) Discuss speed control of DC motor using PLC. (16)

Or

(b) Discuss SCADA system used in automatic Sub-station control. (16)

———————————

31367