

6612

BOARD DIPLOMA EXAMINATIONS

OCT/NOV-2019

DAEI – FIFTH SEMESTER

INDUSTRIAL AUTOMATION

Time: 3 hours

Max. Marks: 80

PART – A

3 X 10 = 30

- Instructions:**
1. Answer **all** questions.
  2. Each question carries **Three** Marks.
  3. Answer should be brief and straight to the point and should not exceed five simple sentences.

1. Define PLC.
2. List types of PLC.
3. List the comparison instructions of PLC.
4. Draw the Ladder diagram for DOL starter.
5. Draw the Ladder diagram of NAND gate.
6. Draw the diagram of master station unit of SCADA.
7. State the principle of DDC.
8. Define Robot.
9. Draw the block diagram of CNC machine.
10. List the commonly used processors in embedded system.

**PART – B**

**5 X 10 = 50**

- Instructions:*
1. Answer any **Five** questions
  2. Each question carries **TEN** Marks.
  3. Answer should be comprehensive and Criteria for Valuation is the content but not the length of the answer.

11. Compare relay based and PLC based control panels.
12. Explain interfacing of PLC with PC.
13. Explain Timer operations with Ladder diagram.
14. Explain sequential control of induction motors and draw the ladder diagram.
15. Explain the creation of graphic symbols using graphic display builder.
16. Explain data acquisition system with block diagram.
17. Draw and explain the block diagram of data logger.
18. Explain the hardware architecture of embedded system.