

Register No.:

725

April 2024

Time - Three hours
(Maximum Marks: 100)

- [N.B.]**
1. Answer all questions under Part-A. Each question carries 3 marks.
 2. Answer all the questions either (A) or (B) in Part-B. Each question carries 14 marks.]

PART - A

1. Define automation.
2. Write about micro PLC.
3. List the different types of PLC programming language.
4. Write any three logical instructions.
5. What is bit shift right?
6. What is sequencer load?
7. List the types of network topology.
8. What is ethernet?
9. What is HMI?
10. What is graphical operator interface?

[Turn over.....

PART – B

11. (a) Explain the functional block diagram of PLC.
(Or)
(b) Explain the operation of TRIAC type output module with a neat sketch.
12. (a) Discuss about the ladder logic diagram.
(Or)
(b) What is a CTU instruction? Explain its working with the help of suitable ladder diagram and timing diagram?
13. (a) Explain about data manipulation instructions.
(Or)
(b) Discuss about the different modes of PLC.
14. (a) Explain the structure of simplified OSI model.
(Or)
(b) Discuss the different types of transmission modes.
15. (a) Explain the operation of OPC server and client with neat diagram.
(Or)
(b) Explain the typical SCADA architecture with necessary diagram.
