

S.B. Roll No.....

PLCs AND SCADA
5th Exam/ECE/4617/Jan'2022
(FOR 2018 BATCH ONWARDS)

Duration: 1.15Hrs.

M.Marks:25

SECTION-A

Q1. Attempt any three questions.

3x5=15

- i. Write down the advantages of PLCs over Electromagnetic Relays.
- ii. Write a short note on Scan cycle of PLC.
- iii. Discuss about the arithmetic instructions used in PLC.
- iv. Discuss in brief about watch dog timer.
- v. Write a short note on timers used in PLC.
- vi. Write a short note on programming terminal of PLC.
- vii. Write a short note on DCS I/O Hardware.

SECTION-B

Q2. Attempt any one question.

1x10=10

- a. Draw the block diagram of PLC System and explain the function of each block in detail.
- b. Draw the block diagram of SCADA and explain the function of each block in detail.
- c. Explain in detail about counter and latch instructions used in PLC.
- d. Draw a ladder diagram for multiple comparison programs for lighting indicator only when the count is between 15 and 22 and explain it.