

Total No. of Questions : 4]

SEAT No. :

P8483

[Total No. of Pages : 1

OCT.22/BE/Insem-69

B.E. (Electrical) (Semester - VII)

PLC AND SCADA

(2019 Pattern) (403143 A) (Elective - III)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Answer Q. 1 or Q. 2, Q. 3 or Q. 4.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Assume suitable data, if necessary.*

- Q1)** a) Explain benefits of Automation. [5]
b) State various advantages and disadvantages of PLC. [5]
c) List the features of PLC also explain in detail CPU and Power Supplies.[5]

OR

- Q2)** a) What is necessity of PLC? Also mention some of the leading manufactures of PLC. [5]
b) Draw the block diagram of a PLC showing the main functional items and explain the functions of each block. [5]
c) Explain how to select PLC for particular application. [5]

- Q3)** a) Draw the block diagram of an analog input module and explain the parts.[7]
b) Compare of Hydraulic, Pneumatic and Electrical actuators. [8]

OR

- Q4)** a) What are different types of sensors? Explain construction and working of any one temperature sensor with a diagram. [7]
b) Explain following two different types of encoders [8]
i) Incremental
ii) Absolute

