

Total No. of Questions : 4]

SEAT No. :

PD111

[Total No. of Pages : 1

[6410]-432

T.E. (Electrical) (Insem)

IoT & ITS APPLICATIONS IN ELECTRICAL ENGINEERING

(2019 Pattern) (Semester - II) (Elective - II) (303151C)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

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

Q1) a) With a neat block diagram, explain in detail fundamental components of IoT. [8]

b) Write a short note on ISO and IEC standards for IoT systems. [7]

OR

Q2) a) Write a short note on IoT Gateways. [5]

b) What is an IoT system? Explain its role in home automation. [5]

c) What are the security concerns in the IoT systems? [5]

Q3) a) Explain in detail features of Node MCU. [8]

b) Explain in detail features of Arduino Nano 33 IoT. [7]

OR

Q4) a) Explain following terms with respect to IoT development platforms. [5]

i) SOC

ii) SBC

b) State the advantages of Raspberry Pi 4 over Arduino 33 IoT and NodeMCU. [5]

c) Compare Arduino nano 33 IoT, NodeMCU and Raspberry Pi 4 on the basis of [5]

i) No. of pins

ii) Operating frequency

iii) Memory

iv) Supported language

