

Total No. of Questions : 8]

SEAT No. :

PE-2240

[Total No. of Pages : 2

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B.E. (Electronics & Telecommunication Engineering)

MODERNIZED IOT

(2019 Pattern) (Semester - VII) (404184 E) (Elective - III)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.
- 2) Draw neat diagrams wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Assume suitable data, if necessary.

Q1) a) Explain IEEE 802.15.4 IoT Protocol in detail. **[9]**

b) Explain HTTP and MQTT session layer Protocol in IoT. **[8]**

OR

Q2) a) What is HART. Explain Basic Working of HART. **[9]**

b) Explain DHCP and AMQP network layer protocol w.r.t. IoT. **[8]**

Q3) a) How will Arduino communicate with Raspberry pi? Explain with example. **[9]**

b) Write a short note on Contiki OS and COOJA simulator. **[8]**

OR

Q4) a) Explain any 8 Arduino functions in detail. **[8]**

b) Explain the process of IoT deployment with respect to Raspberry Pi. **[9]**

Q5) a) Explain Wi-Fi backscatter in IIoT design. **[9]**

b) Explain eHealth IoT applications in detail. **[9]**

OR

P.T.O.

- Q6)** a) Enlist challenges faced by industry related IoT Applications. [9]
b) Explain IIAF Framework in detail. [9]

- Q7)** a) Explain case study on air pollution control system. [9]
b) Explain home automation system with neat diagram. [9]

OR

- Q8)** a) Design IoT based Patient surveillance system. [9]
b) Explain case study on forest fire detection system w.r.t. IoT. [9]

