

Total No. of Questions : 6]

SEAT No. :

P 5833

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BE/InSem/Oct.-552

B.E. (E&TC)

INTERNET OF THINGS

(2015 Pattern) (Elective - I) (Semester - I)

Time : 1 Hour]

[Max. Marks :30

Instructions to the candidates:

- 1) *Neat diagrams must be drawn wherever necessary.*
- 2) *Figures to the right side indicate full marks.*

- Q1)** a) The scope of IoT is not just connecting things. Then what do you think can be included in the scope of IoT? [4]
- b) Draw the generic block diagram of IoT device and explain the necessity of any two blocks in it. [6]

OR

- Q2)** a) IoT is enabled by several technologies. What according to you is most important enabling technology of IoT? Justify your answer. [6]
- b) How are the objects in IoT classified? List out two objects in each category. [4]

- Q3)** a) What is difference between sensor and transducer? Thermocouple is a sensor or transducer? Justify. [4]
- b) Explain principle of RFID. [6]

OR

- Q4)** a) While designing an IoT system, you will be required to select a suitable sensor. List and explain in brief any six selection criteria. [6]
- b) What is a "Sink node" in Wireless Sensor network? Explain with suitable example how data flow is controlled by the sink in WSN. [4]

P.T.O.

- Q5) a)** List out some important features of IEEE 802.15.4 standard. [4]
- b) What is BLE? How it will be useful in IoT system design? [6]

OR

- Q6) a)** List out and explain the features of three types of Zigbee Nodes. [4]
- b) Highway Addressable Remote Transducer (HART) Protocol is useful for setting up IoT Communication. Describe in brief any three features of HART Protocol. [6]

