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]**

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