CBCS Scheme

USN [   ]   16/17SCS24

Second Semester M.Tech. Degree Examination, June/July 2018
Internet of Things

Time: 3 hrs.   Max. Marks: 80

Note: *Answer FIVE full questions, choosing*
ONE full question from each module.

Module-1

1   a. Define internet of things. Justify internet of things is "just a concept". (08 Marks)
    b. Explain the characteristics of an object. Discuss classification of objects with a diagram. (08 Marks)

OR

2   a. Explain any four applications of automotives. (08 Marks)
    b. Discuss the basic elements of an M2M application. (08 Marks)

Module-2

3   a. Differentiate between contactless smart card and RFID tags. (08 Marks)
    b. Discuss the structural aspects of IOT. (08 Marks)

OR

4   a. Illustrate the working of routing protocol for LLN-RPL. (08 Marks)
    b. List out the main features of COAP. Explain the Request/Response model used by COAP. (08 Marks)

Module-3

5   a. Explain the interaction between NFC interrogator and NFC device communicates. (08 Marks)
    b. Explain IEEE 802.15.4 acknowledgement frame format and data frame format. (08 Marks)

OR

6   a. List and explain the advantages of IPv6 over IPv4. (08 Marks)
    b. Describe QoS capabilities in IPv6. (08 Marks)

Module-4

7   a. With a neat diagram, explain deployment design of the weather monitoring IOT system. (08 Marks)
    b. Illustrate with figures service specification for home automation IOT system for mode and state service. (08 Marks)

OR

8   a. Show how the communication occurs between various components of the web socket implementation of the weather monitoring system. (08 Marks)
    b. Write a program in python for smart parking controller native service. (08 Marks)

Module-5

9   a. How do you set up Hadoop cluster? (08 Marks)
    b. Write a short note on Hadoop yarn. (08 Marks)

OR

10 a. Briefly discuss the functions of the key processes of Hadoop. (08 Marks)
    b. Explain Mapreduce job execution workflow. (08 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.