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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 RIFD 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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