INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

M.Tech II Semester End Examinations (Regular) - July, 2017

Regulation: IARE–R16

INTERNET OF THINGS

(Embedded Systems)

Time: 3 Hours   **Max Marks: 70**

Answer ONE Question from each Unit
All Questions Carry Equal Marks
All parts of the question must be answered in one place only

UNIT – I

1. Explain briefly about various security challenge issues in an IoT. **[14M]**

2. (a) List and explain the challenges and issues of IoT. **[7M]**

   (b) Differentiate betweenZigbee and Wifi communication technologies. **[7M]**

UNIT – II

3. (a) Discuss the buffer and timer management for IoT. **[7M]**

   (b) Explain about software partitioning in an IoT. **[7M]**

4. (a) Explain saving and restoring the configuration. **[7M]**

   (b) Discuss about debugging protocols in an IoT. **[7M]**

UNIT – III

5. (a) Compare the types of information exchange and the related time of synchronization for various types of network architectures. **[7M]**

   (b) What are the various communication scenarios that occur in a product lifecycle? Explain. **[7M]**

6. (a) Describe the ways of impact of IoT on to the system agility. **[7M]**

   (b) List out the requirements for an Internet of Things addressing scheme. Briefly explain any two properties that an addressing scheme for the Internet of Things devices should have. **[7M]**

UNIT – IV

7. (a) Give the three ways on how"making is connecting" in the context of DiY. **[7M]**

   (b) Draw the EURIDICE knowledge base conceptual model and explain. **[7M]**

8. (a) Draw and explain network architecture and middleware for Wireless Sensor and Actuator Networks in DiYSE. **[7M]**

   (b) Define multi-agent Systems in an IoT. What are its properties? **[7M]**

UNIT – V

9. (a) Draw the simplified component architecture of the social access controller (SAC) and explain its functionality. **[7M]**

    (b) Write short notes on future web of things, of an IoT **[7M]**

10. Discuss the case study on be close elderly monitoring of an IoT. **[14M]**

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