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Total Number of Pages : 01 M.TECH

# M.TECH 1<sup>ST</sup> SEMESTER REGULAR EXAMINATIONS, DECEMBER 2017 PRINCIPLES OF INTERNET OF THINGS

**Branch: EC, Subject Code:MECPC1030** 

Time: 3 Hours Max Marks: 70

The figures in the right hand margin indicate marks.

## **PART-A**

( 2X10=20 MARKS)

# 1. Answer the following questions.

- a. What is the Internet of Everything?
- b. Define Mesh topology with example?
- c. What are the important Components of Internet of Things?
- d. What are the top 5 Machine-to-Machine (M2M) applications in the world?
- e. What impacts will the Internet of Things (IoT) have on Transportation Sector?
- f. How the Internet of Things (IoT) makes a difference to the businesses?
- g. What impacts will the Internet of Things (IoT) have on Infrastructure and Smart Cities Sector?
- h. What is the controller service in weather monitoring system?
- i. What is big-data and why we are using big-data in IOT?
- i. Differentiate between 6LOWPAN and IEEE 802.15.4-LR WPAN?

## PART-B

(5 X 10=50 MARKS)

## Answer any five questions from the following.

- 2. a. Explain about various protocols used in IOT.
  - b. Explain identifier, enabling technologies of IOT.
- 3. a. Define WSN.
  - b. Explain about various concepts involved in WSN.
- 4. a. Explain about standardizing the IOT.
  - b. Describe about exploiting the potential of IOT, promoting ubiquitous networking.
- 5. a. List various architectures of home network applications.
  - b. Explain about Internet of things using PLC technology .
- 6. a. What are the challenges and issues in RFID system.
  - b.Discuss various components of RFID system.
- 7. a.Explain in detail about data synchronization techniques in IOT.
  - b. Explain in detail about clustering principle in IOT.
- 8. a. Explain in detail about application of IOT in city automation and home automation.
  - b. Explain in detail about business model and business innovation in IOT.