D17002004

**Registration No:** | | | | | | | | | | |

**Total Number of Pages : 01** **M.TECH**

**M.TECH 1ST SEMESTER REGULAR EXAMINATIONS, DECEMBER 2017**
**INTERNET OF THINGS**
**Branch: CS, Subject Code:MCSPC1010**
**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) Define IoT & its Characteristics?
b) What are the difference between machines in M2M and Things in IoT?
c) How do data collection and analysis approaches differ in M2M and IoT?
d) What is web service? What are different types of web services used in IOT?
e) Differentiate between physical entity and virtual entity in IoT system?
f) What do you mean by data visualization? Explain it.
g) Define Mesh topology with example?
h) What is the controller service in weather monitoring system?
i) What is big-data and why we are using big-data in IOT?
j) Differentiate between 6 LOWPAN and IEEE 802.15.4-LR WPAN?

## PART-B (5 X 10=50 MARKS)

**Answer any five questions from the following.**

2 .a) What are the different layers of IoT protocols? Explain functions of all the layers?
b) Define IoT, explain about things/objects in IoT with example.
3. a) What are the different communication models of IoT?
b) Explain publish-subscribe communication model &request-response communication model?
4 a) Describe NFV architecture &explain how it can be used for virtualizing IoT devices?
b) Explain about components of RFID System and issues.
5. a) Explain about various ongoing research projects in IoT.
b) Define and explain various concept involved in WSN
6 a) Explain industry 4.0 concept?
b) Describe about localization and handover management on RFID.
7 a) Describe the difference between IoT and M2M with example?
b) Design an architecture for home network application.
8 a) What is an IoT device? Explain the basic building blocks of IoT device with diagram?
b) Write python program for controlling an LED with a switch?

==0==