Roll No ....

ME-702(B)-CBGS
B.Tech., VII Semester
Examination, December 2020
Choice Based Grading System (CBGS)
Internet of Things (IOT)
Time : Three Hours

Maximum Marks : 70

Note: i)   Attempt any five questions.

       ii)   All questions carry equal marks.

1. a) What is relation between WSN and IOT? Explain with example.   7

    b) Explain MQTT Protocol with the example. What is the role of MQTT protocol in IOT?   7

2. a) Discuss, what are the various components and communication media required for making smart building?   7

    b) Why do IOT system have to be self-adapting and self-configuring? Explain in detail.   7

3. a) What are the main internal components of a IoT device? Explain in detail.   7

    b) Explain about protocol standardization for IoT. Also discuss other issues with IoT standardization.   7

4. a) Give an account of platform middleware for Internet of Things. How clustering principle can be used in IoT.   7

    b) How gateway devices and mobile node devices feature in the autonomy architecture of IoT system?   7

5. a) What is IEEE 802.15.4 protocol ? How it is related to IoT? 7

   b) What are uses of SPI and I2C interfaces on Raspberry PI? 7

6. a) What is the difference between machines in M2M and things in IoT? Explain with example. 7

   b) What are the architectural constraint of REST ? Explain in detail. 7

7. a) Explain various trend in Information and communication technologies and its impact on IoT. 7

   b) Discuss various standards and technologies that enables Adhoc connectivity between devices that forms the basis of IoT. 7

8. a) Explain device and application functional group, communication functional group, IoT service functional group and virtual entity functional group in detail with a neat diagram of IoT functional view. 7

   b) Explain data storage, data processing, data analysis steps in M2M data management. 7

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