67217

MCA 5th Semester CBCS
Scheme (w.e.f. 2018-19)
Examination – December , 2018
INTERNET OF THINGS
Paper : 18MCA35DB1

Time : Three Hours]   *[Maximum Marks : 80*

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Question No. 1 is *compulsory.* In addition to this attempt *four* more questions selecting *one* question from each Unit.

1. (a) What is web 3.0 ?   2 × 8 = 16

    (b) What is M2M ?

    (c) What do you mean by protocols ?

    (d) What do you mean by Unified Data standards ?

    (e) What is the use of sensors in mobile phones ?

    (f) What is cloud computing ?

    (g) Write short note on Information cascades.

    (h) Explain Two Pillars of the Web.

UNIT – I

2. (a) What is IoT ? Discuss various Applications of IoT in detail. 8

(b) What is IoT middleware ? How middleware plays a crucial role in IoT ? Explain. 8

3. Explain the following : 2 × 8 = 16
(a) IoT Information Security
(b) DNA Of IoT

UNIT – II

4. (a) Explain the Zigbee Architecture in detail. 8

(b) Explain the issues with IoT standardization in detail. 8

5. Explain the following : 2 × 8 = 16
(a) RFID Protocols
(b) APS layer Security

UNIT – III

6. (a) Differentiate between Sensors and Actuators. Explain their working principles. 8

(b) How the microcontroller is connected with mobile device in IoT setup ? Explain the connection to the Internet using wi-fi /ethernet also. 8

7. (a) What is the relationship between Cloud computing and IoT ? Explain in detail. 8

(b) How the data is acquired from sensors ? Explain various steps involved. 8

UNIT – IV

8. Explain the following in detail : 2 × 8 = 16
(a) Business models for IoT
(b) Structural models for IoT

9. (a) What is Network Dynamics ? What are various population models for IoT ? Explain. 8

(b) Differentiate between Web of Things (WoT) and Internet of Things (IoT) in detail. 8

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