

Unit-IV

8. Why business models are needed ? Explain business models for IoT
9. What is WoT ? How is it different from IoT ? Discuss the pillars of web and architecture standardization for WoT.

67217

(4)

RR-490

Roll No :

Total No. of Questions : 9]

[Total No. of Pages : 4

67217

MCA 5th Semester (Regular)

Examination, February-2022

(CBCS Scheme Commenced w.e.f. 2018-19)

Paper-18MCA35DB1

INTERNET OF THINGS

Time : Three Hours]

[Maximum Marks : 80

Before entering 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 :- Attempt five questions in all, selecting one question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

Compulsory Question

1. (a) What are four pillars of IoT and how are they interconnected with each other ?
- (b) List out different I/O interfaces used in IoT.

67217

(1)

RR-490 P.T.O

- (c) Discuss various protocols used in application layer.
- (d) What are the characteristics of M2M ?
- (e) Differentiate between sensors and actuators.
- (f) What are different wired and wireless connectivity used in IoT ?
- (g) When information cascades occur ?
- (h) What is WoT Portal ?

Unit-I

- 2. (a) Draw IoT reference architecture with description of its different layers.
- (b) Explain how gateways are used for data management, local applications and device management in IoT.
- 3. (a) Discuss IoT data management and compute stack with fog computing.
- (b) Summarize the Megatrends, Capabilities and implications of IoT.

67217

(2)

RR-490

- #### Unit-II
- 4. (a) Give the various M2M/IoT device types and explain their characteristics and the deployment scenarios
 - (b) What are the challenges and issues in RFID system ? Discuss various components of RFID system.
 - 5. (a) How tunneling legacy and protocol translation are defined in SCADA ? Explain.
 - (b) Explain the area of development and standardization in IoT.

Unit-III

- 6. (a) Discuss the types of sensors and actuators in IoT. How communication takes place with these ?
- (b) Explain the flow of information through a context enrichment process in IoT
- 7. (a) What is Smart Object ? Discuss its characteristics and role of sensor network in smart object.
- (b) Discuss MQTT framework and message format in detail.

67217

(3)

RR-490 P.T.O