

CBCS SCHEME

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18EI744

Seventh Semester B.E. Degree Examination, Feb./Mar. 2022 Internet of Things

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Explain the characteristics of IoT. (10 Marks)
b. Explain the communication APIs for IoT. (10 Marks)

OR

- 2 a. Explain the IoT reference model. (10 Marks)
b. Write short note on : i) Bluetooth ii) RFID. (10 Marks)

Module-2

- 3 a. Discuss the issues and challenges of a wireless sensor network. (10 Marks)
b. Compare on the advantages of digital sensors over analog sensors. (10 Marks)

OR

- 4 a. Explain the architectures of wireless sensor network. (10 Marks)
b. Define sensor. Write the types of sensor with few example for each. (10 Marks)

Module-3

- 5 a. Explain in detail the working of MQTT protocol. (10 Marks)
b. Explain the architectures and features of CoAP. (10 Marks)

OR

- 6 a. Explain the Extensible Messaging and Presence Protocol (XMPP). (10 Marks)
b. Discuss Representational State Transfer (REST). (10 Marks)

Module-4

- 7 a. Discuss about IoT in retail management. (10 Marks)
b. Explain the public safety reference architecture. (10 Marks)

OR

- 8 a. Discuss about IoT for agriculture. (10 Marks)
b. Explain the school bus safety communication architecture. (10 Marks)

Module-5

- 9 a. Explain the domain model specification of IoT. (10 Marks)
b. Explain the deployment design of the home automation IoT system. (10 Marks)

OR

- 10 a. Explain the operational view specifications for home automation system in IoT. (10 Marks)
b. Discuss deriving services from process specification and information model for home automation IoT system. (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and/or equations written eg, 42+8=50, will be treated as malpractice.