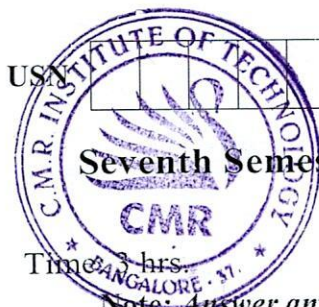


CBCS SCHEME



21CS735

Seventh Semester B.E./B.Tech. Degree Examination, June/July 2025 Internet of Things

Max. Marks: 100

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

Module-1

- 1 a. With a neat diagram, briefly explain evolution of IoT. (10 Marks)
- b. List IoT planes and explain various enablers of IoT. (10 Marks)

OR

- 2 a. Briefly explain IoT networking components. (10 Marks)
- b. Discuss classification of addressing strategies in IoT. (10 Marks)

Module-2

- 3 a. List and explain classification of sensors based on :
i) Power requirements
ii) Sensor output
iii) Property to be measured. (10 Marks)
- b. With a block diagram, explain functional blocks of a typical sensor node in IoT. (10 Marks)

OR

- 4 a. Define sensor. Explain sensor characteristics with an example. (10 Marks)
- b. What is actuator? Briefly explain actuator types. (10 Marks)

Module-3

- 5 a. With neat diagram, explain two types of off-site processing topologies. (10 Marks)
- b. Explain IoT device design and selection considerations. (10 Marks)

OR

- 6 a. Explain three parts of data offloading. (10 Marks)
- b. Explain types of data formats and also explain importance of processing in IoT. (10 Marks)

Module-4

- 7 a. Explain various communication topologies in Zigbee with neat diagram. (10 Marks)
- b. With neat diagram, discuss the functional protocol stack of thread in comparison to the OSI stack. (10 Marks)

OR

- 8 a. Explain an outline of the RFID operation of communication with neat diagram. (10 Marks)
- b. With block diagram, explain bluetooth protocol stack. (10 Marks)

Module-5

- 9 a. Explain any five important features of IPv6. (10 Marks)
- b. With block diagram. Explain "Physical web" as one of the discovery protocol. (10 Marks)

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- 10 a. What is MQTT? Briefly explain MQTT message types. (10 Marks)
- b. With block diagram of URI link, explain URI. (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.