EPCET LIBRARY BANGALORE-49

CBCS SCHEME

USN | | | | | | | | | | |

21CS735

Seventh Semester B.E./B.Tech. Degree Examination, June/July 2026
Internet of Things

Time: 3 hrs. Max. Marks: 100

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

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.

Module-1

1 a. What is IoT? Differentiate between IoT and M2M & IoT and WoT. **(10 Marks)**

b. Explain the evolution of IoT with diagram and example. **(10 Marks)**

OR

2 a. How is node mobility handled in IoT Network? **(10 Marks)**

b. Explain the Addressing strategies in IoT. **(10 Marks)**

Module-2

3 a. Define Sensor, explain the functional blocks of a typical sensor node in IoT. **(10 Marks)**

b. List and explain different types of sensing and provide an example for each. **(10 Marks)**

OR

4 a. What is an Actuator? Explain the different types of actuators with an example for each. **(10 Marks)**

b. Differentiate between Sensors and Actuators. **(10 Marks)**

Module-3

5 a. What are the different data formats found in IoT network traffic streams? **(10 Marks)**

b. Define processing offloading with block diagram and explain any one data offloading. **(10 Marks)**

OR

6 a. Explain the pros and cons of on-site and off-site processing. **(10 Marks)**

b. Explain the IoT Device Design and Selection Considerations. **(10 Marks)**

Module-4

7 a. Explain the protocol stack of IEEE 8021.15.4. **(10 Marks)**

b. Elaborate on the various network topologies of Zigbee and explain the protocol stack of Zigbee. **(10 Marks)**

OR

8 a. Differentiate between Class 1, 2 and 3 Bluetooth devices. **(10 Marks)**

b. Explain the Z-wave protocol stack. **(10 Marks)**

Module-5

9 a. Explain IPV6 format. **(10 Marks)**

b. Explain the Websockets in a stack. **(10 Marks)**

OR

10 a. Describe the following standards :
i) Enocean
ii) DLNA **(10 Marks)**

b. How is X-10 different from DLNA? **(10 Marks)**

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