

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATIONS-2022

B.Tech-VII Semester (CSE/IT: Minor in ECE)

COURSE CODE (CREDITS): 18B1WEC747(3)

MAX. MARKS: 25

COURSE NAME: Internet of Things

COURSE INSTRUCTOR: Dr. Salman Raju Talluri

MAX. TIME: 1 Hour 30 Min.

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

1. What do you mean by service discovery for IoT. Explain the working of Bluetooth Beacons and Chip protocol.
[4marks] [Co-3]

2. Write a short note on Z-wave components and terminology associated with this. Explain the working of Z-wave technology with Radio specification.
[4marks] [Co-3]

3. Write a short note on Electronic Product Code (EPC). What are the different types of EPC tags? Specify the functionality of different tags.
[4marks] [CO-4]

4. What do you mean by protocol stack? Give three different topologies that are commonly used in IoT communication networks.
[4 Marks] [Co-2]

5. Explain in detail about the Controller Area Network protocol with the application area. [4 Marks] [Co-2]

6. Define/Explain the following. [5marks] [Co-1 and Co-2]
 - a. TDMA vs. FDMA.
 - b. Radio dead spot
 - c. Piezoelectric vs. thermoelectric energy harvesting.
 - d. Path loss.
 - e. Typical segments in a Datagram.