

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- Feb. 2018

B.Tech (CSE, IT,ECE) VIII Semester

COURSE CODE: 15B1WCI832

MAX. MARKS: 15

COURSE NAME: Internet of Things Architecture and Design

COURSE CREDITS: 03

MAX. TIME: 1 Hr

Note: All questions are compulsory. Each question carries equal marks. Carrying of mobile phone during examinations will be treated as case of unfair means.

1. (a) Explain all the seven layers of IoT Reference Model.
(b) Explain five layers of an industrial IoT Platform.
(c) Explain various wireless technologies used in IoT.
2. Explain the following communication protocols in IoT:
 - a. For collecting device data and communicating it to servers (D2S)
 - b. For connecting devices to people, a special case of the D2S pattern, since people are connected to the servers.
 - c. For integrating intelligent machines (D2D)
 - d. A queuing system designed to connect servers to each other (S2S)
3. What is Contiki? Explain the following features of Contiki:
 - a. Memory Allocation
 - b. Full IP Networking
 - c. Power Awareness
 - d. 6lowpan, RPL, CoAP
 - e. Dynamic Module Loading