

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
MAKEUP EXAMINATION - April 2018

B.Tech VIII Semester

COURSE CODE: 15B1WCI832

MAX. MARKS: 25

COURSE NAME: Internet of Things Architecture and Design

COURSE CREDITS: 03

MAX. TIME: 1.5 Hrs

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

1. What Is the Internet of Things (IoT)? How Does the IoT Work? What Impacts Will the IoT have on following sectors?

i. Agriculture	ii. Energy
iii. Health Care	iv. Manufacturing
v. Transportation	vi. Infrastructure and Smart Cities

2. (a) What Issues Might Affect the Development and Implementation of the IoT?
(b) How Is Industrial Internet Of Things (IIoT) Different From The Internet Of Things (IoT)?
3. (a) Explain the following of Industrial Cyber-Physical Systems:
a. Technical Dimension of Cyber-Physical Systems
b. Human Dimension of Cyber-Physical Systems
(b) Draw and explain the elaboration of an Application Map for Industrial Cyber-Physical Systems.
4. What is the use of Smart Sensors in the Edge layer of IoT? Explain the following:
a. Digital sensor within an instrument
b. Analog sensor analyzed by a PC
c. Multiple sensors displayed over internet
d. Instrumentation Amplifier
5. Explain all the IEEE standards for IOT with transfer rate, power consumption, range, number of connected devices, and applications.