2054
B.E. (Information Technology)
Eighth Semester
OEIT-801: Internet of Things

Time allowed: 3 Hours

Max. Marks: 50

NOTE: *Attempt* <u>*five*</u> *questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.*

x-x-x

I. Define the following:-

   a) Fog computing

   b) Push-Pull Communication model

   c) IoT level 1

   d) WSN

   e) Sensors and actuators

   (5x2)

UNIT - I

II. What are the characteristics of IoT? Explain different IoT enabling technologies. (10)

III. a) Compare and contrast M2M and IoT.

   b) How is Arduino different from a desktop computer? Write a python program on Arduino to blink a LED.

   (5+5)

IV. What are standardize protocols for IoT. Discuss in detail IEEE 802.15.4   (10)

UNIT - II

V. Define SDN. How is it different from traditional n/w? Explain its architecture in details.

   (10)

VI. What is cloud computing? Discuss its characteristics. Explain different service models of cloud with examples.

   (10)

VII. Write short notes on any two of the following:-

   a) Sensor Cloud

   b) Data Analytics using IoT

   c) IoT in agriculture

   (5+5)

x-x-x