

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B.Tech. Summer 2018 – 19 Examination

Semester: 8**Subject Code: 03107482****Subject Name: Internet of Things****Date: 01/05/2019****Time: 10:30 am to 01:00 pm****Total Marks: 60****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Objective Type Questions - (All are compulsory) (Each of one mark) (15)

1. How many digital I/O pins are there in ArduinoUno Board?
2. DHT11 is _____ sensor.
3. List Sensor Classes based on data types.
4. What is Hysteresis Error for Sensor?
5. What is Actuator?
6. WSN stands for _____.
7. What is SDN?
8. Define IOT.
9. What is the size of IPv6 addressed?
10. What is Network virtualization?
11. Internet of Things (IoT) can be integrated with which of these separate domains:
 - a. Cloud-based storage and computing.
 - b. Cyber Physical Systems.
 - c. Big-data networks.
 - d. All of these.
12. _____ is uniquely identifiable embedded computing devices.
 - a. Internet
 - b. IoT
 - c. Bigdata
 - d. Cloud
13. _____ are the inter connectors.
 - a. Web
 - b. Internet
 - c. Network
 - d. APIs
14. Arduino boards support output supply voltage of:
 - a. 5V only
 - b. 3.3 V only
 - c. 9 V only
 - d. 5V, 3.3V
15. _____ Services are the way in which the IoT is connected to data.
 - a. Cloud
 - b. Big data
 - c. Internet
 - d. Network

Q.2 Answer the following questions. (Attempt any three) (15)

- A) Write short note on enabling technology of IoT.
- B) Explain: The smart factory.
- C) What Impact an IoT have on an Agriculture sector?
- D) Write a code for interfacing of PIR sensor with Arduino Board.

Q.3 A) Explain layered IOT architecture using figure. (07)

- B) Explain IoT value chains. (08)

OR

- B) Discuss Doman model specification of Home automation IoT system. (08)

Q.4 A) Explain step involve in IoT design methodology with help of flow chart. (07)**OR**

- A) Discuss the Deployment and Operational View of IoT for smart Parking system. (07)

- B) Explain security, privacy and trust in IoT-Data-Platforms for smart cities. (08)