

Roll No

IT-8004 (2) (CBGS)
B.E. VIII Semester Examination, June 2020
Choice Based Grading System (CBGS)
Internet of Things

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) Define IoT and give its characteristics.
b) With the help of a generic block diagram explain the architecture of IoT.
2. a) What are various IoT communication models? Draw and explain them.
b) Discuss any five application areas where IoT technology can be applied.
3. How does Raspberry Pi(3) is different from desktop computer? What is the use of SPI, I2C interfaces? Draw and explain GPIO Pins of Raspberry Pi(3).
4. a) Discuss architecture of wireless sensor networks and write its applications.
b) Describe any five sensors that are most commonly used in IoT applications.
5. a) Discuss IEEE 802.15.4g and 802.15.4e standards.
b) Give an overview of Zigbee network. What are its applications?
6. a) What are the functions of Routing protocols? Define routing over low power and lossy networks.
b) Explain application layer protocols COAP and MQTT.
7. Define and discuss following attacks.
 - i) Denial of service
 - ii) Man in middle
 - iii) Sniffing network communications
8. Write short notes on any two of the followings.
 - i) Use of IoT in smart parking
 - ii) Home automation
 - iii) Health fitness monitoring
