T.Y CSE Sem-VI

BTCOE604: Internet of Things

Question Bank

[Unit 1] IoT Introduction

1.Explain the impact of IoT.

2.What are the challenges in IoT?

3.What is IoT technology? Explain it with the help of a example.

4.Explain the drivers behind the network architecture.

5.Explain in brief IoTWF standardized architecture.

6.Explain in brief one M2M IoT standardized architecture.

7.Explain in detail the IoT Data Management and Compute Stack.

8.Explain in brief simplified IoT architecture.

9.How IT is related with IoT?

10.Explain the difference between Services layer and the Network layer for IoT architecture.

[Unit 2] Smart objects

1. Write a short note on smart objects.

2. How the sensors are being clustered and categorized?

3. Distinguish between Sensors and Actuators.

4. What are the different criteria for connecting smart objects?

5. Write a short note on wireless sensor networks.

6. What are the trends in smart objects?

7. What is the impact of power on smart objects?

8. Explain the characteristics of smart objects.

9. Explain the characteristics of LoraWAN.

10. Explain the IEEE 802.15.4 technology in detail.

11. Write a short note on security in Wi-fi technology.

[Unit 3] IP Layer

1. What is the need for optimization in IP?

2. What is the need for optimizing IP for IoT?

3. Explain SCADA protocol in detail.

4. Explain the difference between CoAP and MQTT protocols.

5. Explain CoAP protocol in detail.

6. Explain profiles and compliances for IP.

[Unit 4] Data and Analytics for IoT

1. Write a short note on edge streaming analytics.

2. Explain OCTAVE in detail.

3. Explain the Hadoop big data tool.

4. What are the challenges in IoT security?

5. Write a short note on network analytics.

6. Distinguish between supervised learning and unsupervised learning.

7. What is NoSQL?

[Unit 5] IoT Physical Devices and Endpoints

1. Explain the smart city IoT architecture.

2. Explain the software and hardware aspects of Arduino.

3. Explain the connection and configuration process for Raspberry Pi.

4. How to develop Wireless Temperature Monitoring application on Raspberry Pi

5. Write a short note on OS for Raspberry Pi.

6. Distinguish between Arduino and Raspberry Pi.

7. Explain the IDE programming for Arduino with examples.

8. What are the different functions in Arduino programming?

9. How to establish remote access connection with Raspberry Pi?