SNS COLLEGE OF ENGINEERING

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AUTONOMOUS INSTITUTION

Department of Computer Science and Technology

IOT-Question Bank

Unit - 1

1. Define IOT. Discuss advantages and disadvantages of IOT.
2. Explain different characteristics of IOT.
3. Explain different components of IoT system
4. Draw and explain IOT architecture.
5. Explain challenges of the Internet of Things.
6. Explain IOT security challenges.
7. What is Internet of Things? What are the applications of IoT?
8. Define following terms: IoT, Sensor
9. Define Internet of Things. Briefly describe vision of IoT.

Unit - 2

1. Explain sensor and microcontroller.
2. Difference between Microcontroller and Microprocessor.
3. Explain specification of sensor.
4. Discuss the IoT Sensors.
5. Define Sensors, Actuators, Transducers.
6. What is Sensor? List different types of Sensors used to develop IOT
7. Write about any four sensors and their usages.
8. Classify sensors. Give example of each.
9. Give examples of commonly used actuators in IoT.
10. Explain need of Relay while using Actuators.
11. Explain need of ADC chip while using Analog sensors.

Unit - 3

1. What is Arduino? Explain features of Arduino architecture.
2. Draw and explain Arduino architecture.
3. Explain pinMode(), digitalRead() and digitalWrite () functions of Arduino.
4. Write a code to blink LED ON and OFF.
5. List out library functions of Arduino. Explain any 2 of them.
6. List out and explain operators.

Unit - 4

1. Differentiate CoAP and MQTT.
2. Discuss MQTT protocol in Detail.
3. Explain Constrained Application Protocol (COAP) in detail.
4. What is BLE? Explain components of BLE.
5. Describe Transport layer protocol in detail. (BLE, Li-Fi).
6. Write functionality of XMPP.
7. Explain basic sensor topologies.

Unit – 5

1. Explain smart parking IOT application with diagram.
2. Explain agriculture system of IOT with diagram.
3. Explain Smart Home Automation system based on IOT with diagram.