IOT-Unit-1

1. List down IoT Applications for Value Creations.
2. Explain layered IOT architecture using figure.
3. Define IoT. Explain Characteristics of the IoT.
4. Explain Architecture of Internet of Things.
5. Difference between cyber physical system and IoT.
6. Difference between Wireless Sensor Network (WSN) and IoT.

IOT-Unit-2

7. What is MQTT? Explain working Principal of MQTT with Suitable Example.
8. What is CoAP? List down Layers of CoAP and explain in Details.
9. Draw and Explain Message format of CoAP.
10. Explain XMPP Protocols with Architecture.
11. Explain DDS Protocols working principal with Architecture.
12. What is BLE? Give various features of BLE.
13. Draw and Explain Architecture of BLE.
14. Draw and explain Li-Fi Working Principal.
15. What is Software-Defined Networking (SDN)? Explain Features of SDN.
16. Give the difference between IPv4 and IPv6.

IOT-Unit-3

1. What is Sensors in IoT? List down Common Sensors used in IoT.
2. Explain obstacle sensor working principal and interfacing with Arduino.
3. Explain GPS Sensor in IoT? Also interfacing of GPS Sensor with Arduino.
4. Draw and Explain 8051 Micro controller Architecture.
5. What is ARM? Draw and Explain Data Flow model of ARM.
6. Give difference between Microprocessor and Micro Controller.
7. Refer and keep in mind all basic Sensors Concept with working principle.

IOT-Unit-4

1. What is cloud computing? Explain SaaS, IaaS, PaaS in details?
2. Explain Private, Public and hybrid Cloud in details.
3. List and explain Iot with Cloud Challenges.
4. Enlist Parameters of Cloud Service Provider(CSP) also Explain in Details.
5. Explain Fog Computing in Details.
6. Give the difference between Edge computing and Fog Computing.

IOT-Unit-5

1. Draw and Explain Common Architecture for IOT Application.
2. Explain in Detail how Health cares application work with IOT.
3. Draw and Explain Healthcare Application Architecture.
4. Give Detail Scenario for IOT in Retail with Architecture.
5. Draw and explain Driver Assistance Application architecture with IOT.
6. Draw and explain collision Impact Detection Architecture with IOT.
7. Draw and explain Water Quality Monitoring Architecture using IOT Based Application.

IOT-Unit-6

1. Define Term
   a) PinMode ()
   b) DigitalWrite()
   c) DigitalRead()
   d) Delay()
2. What is RaspberryPi?
3. What is NOOBS?
4. Write down Steps for Python Programming for GPIO.
5. Differentiate between Arduino and Raspberry pi
6. Enlist the advantages of Raspberry pi over Arduino.
7. What is Arduino? Enlist and Define Various Components used in Arduino uno board.

IOT-Unit-7

1. State and explain IOT Security Architecture in Details.
2. List down Challenges in IOT Security also explain in Details.
3. Explain Mirai botnet Algorithm.