



## Unit – 01: Introduction to IOT

1. Define the term IoT. What are the application of IoT?
2. Discuss the functions of each block of the Basic IoT system.
3. What is IoT Platform? Explain its type in brief.
4. What is python? Explain the basic features of python programming.
5. Write short notes on:
  - a. AWS IoT Platform
  - b. GCP IoT Platform
  - c. AZURE IoT Platform
  - d. Python programming

## Unit 2: IoT Communication protocols

6. Define IoT communication protocols. Discuss about BLE protocol.
7. Differentiate between Bluetooth and Wi-Fi communication protocols.
8. Write short notes on:
  - a. MQTT
  - b. ZigBee
  - c. LoRa
  - d. Wi-Fi



## Unit-3: Sensors and Hardware for IoT

9. What do you mean by sensors? Explain different types of sensor in brief.
10. Differentiate between sensor and actuator?
11. What is sensor IOT development board? Discuss its type in brief.
12. Discuss about wireless network. What are advantages of wireless network?
13. Explain in brief about Node MCU. Also write the features of it.
14. Write short notes on:
  - a. Actuators
  - b. Transducer
  - c. Wi-Fi Library



## Unit – 04: IoT APIs and its Integration

15. What do you mean by IoT API? What are the application of API?
16. Explain different types of IoT API.
17. Discuss MQTT Broker subscriber/publisher model.
18. How to create an API using python?
19. Write short notes on:
  - a. REST
  - b. SOAP
  - c. JSON

## Unit – 05: IoT Applications

20. What do you mean by IIoT? What are the application of IIoT?
21. What are the application of IoT in Healthcare?
22. Explain the uses of IoT in agriculture.
23. Discuss in brief IoT application in security and law enforcement.

