

III B. Tech II Semester Supplementary Examinations, December -2023
IOT AND APPLICATIONS

(Com to EEE,CSE,IT,CSE(AI&ML),CSE(CS),CSE(DS), AI&DS)

Time: 3 hours

Max. Marks: 70

Answer any **FIVE** Questions **ONE** Question from **Each unit**
 All Questions Carry Equal Marks

UNIT-I

1. a) Define IoT, explain the enabling Technologies. [7M]
 b) Discuss about Evolution of Internet of Things. [7M]
 (OR)
2. a) Define IoT and explain about the different types of IoT models. [7M]
 b) Explain about the Design principles and needed capabilities IoT. [7M]

UNIT-II

3. a) Explain the ARM Cortex Processors of IoT supported Hardware platform with an example. [7M]
 b) Explain about the difference Arduino and Raspberry Pi. [7M]
 (OR)
4. Write and explain Cortex-M0 Processor Instruction Set and ARM and Thumb Instruction Set. [14M]

UNIT-III

5. a) Explain about Different communication technologies with an example. [7M]
 b) Differentiate the differences between MQTT and Bluetooth protocols. [7M]
 (OR)
6. a) Define Bluetooth, write and explain the different Bluetooth Key Versions. [7M]
 b) Differentiate the differences between Zigbee and Bluetooth protocols. [7M]

UNIT-IV

7. a) Explain about Data acquisition with an example. [7M]
 b) Define data, Explain the differences between Structured data and Unstructured Data. [7M]
 (OR)
8. a) Explain about IoT cloud based services using the Xively platform sensor. [7M]
 b) Explain about IoT application development. [7M]

UNIT-V

9. a) Describe Healthcare and give any 2 examples of Healthcare IoT for daily use. [7M]
 b) Explain any 2 Home appliances of IoT. [7M]
 (OR)
10. a) Discuss about Cloud Analytics for IoT Application. [7M]
 b) Describe Home Automation and give any 2 examples of Home Automation IoT for daily use. [7M]

