Code No: **20CO4T03**

II B. TECH II SEMESTER REGULAR EXAMINATIONS, JULY - 2022
INTRODUCTION TO IoT
(CSE – INTERNET OF THINGS)

Time: 3 hours   Max. Marks: 70

Note: Answer **ONE** question from each unit **(5 × 14 = 70 Marks)**

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UNIT-I

1. a) Elaborate on the significance of Physical design of IoT. [7M]
   b) Summarize the Challenges and issues of IoT. [7M]

(OR)

2. a) Explain the IoT Architecture with neat sketch. [7M]
   b) Write a note on the security challenges in IoT. [7M]

UNIT-II

3. a) Explain HTTP and XMPP protocols in IoT. [7M]
   b) Discuss the importance of Wi-Fi and GSM technology in IoT. [7M]

(OR)

4. a) Explain the fundamental components of SCADA with neat [6M]
      sketches.

   b) Recall the role of IPv6 and 6LoWPAN in IoT. [8M]

UNIT-III

5. a) Discuss briefly about wireless sensor Networks. [7M]
   b) Explain the role of M2M as one of the four pillars of IoT. [7M]

(OR)

6. a) What is Big Data Analytics and Why is it important? [7M]
   b) What are the uses of Cloud Computing and How it works in [7M]
      IoT?

UNIT-IV

7. a) Explain the features of Arduino with a neat diagram. [7M]
   b) Explain the working of Ultrasonic and PIR Sensors. [7M]

(OR)

8. a) Discuss the protocols supported by Contiki OS. [7M]
   b) How communication is established with mobile devices using [7M]
      Wi-Fi?

UNIT-V

9. a) Explain the design of e-healthcare platform using open-source [7M] hardware and software.

b) With a neat sketch, explain smart home development using IoT. [7M]

(OR)

10. a) Explain Data analytics frame work for IoT. [7M]

b) Discuss the Smart Agriculture application using IoT. [7M]

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