

III B. TECH I SEMESTER REGULAR EXAMINATIONS, FEB - 2022
INTERNET OF THINGS
(Electrical & Electronics Engineering)

Time: 3 Hours

Max. Marks: 60

Note: Answer **ONE** question from each unit (**5 × 12 = 60 Marks**)

~~~~~

UNIT-I

1. a) Discuss in detail about the characteristics of IoT. [6M]
- b) Explain in brief about IoT network considerations and Challenges in real time implementation. [6M]

(OR)

2. a) Draw the physical design of IoT and explain each level in brief. [6M]
- b) Explain in brief [6M]
  - I. 6LoWPAN
  - II. ZIGBEE
  - III. NFC
  - IV. ETHERNET
  - V. TCP
  - VI. XMPP

UNIT-II

3. a) Differentiate between M2M and IoT. [6M]
- b) What are the important challenges in network virtualization? [6M]

(OR)

4. a) Explain in detail about the basic building blocks of IoT. [6M]
- b) Explain in brief about the key elements of a Software Defined Network (SDN) [6M]

UNIT-III

5. a) What are the main challenges of an Internet of Things (IoT)? [6M]
- b) Describe in detail on five layer structured IoT [6M]

(OR)

6. a) What are the important security challenges in IoT system? [6M]
- b) Sketch the Social IoT architecture and explain in detail. [6M]

UNIT-IV

7. a) Design the protocol layer of IoT and explain various protocols used in each layer. [6M]
- b) Demonstrate in detail about specification of domain model. [6M]

(OR)

8. a) Differentiate between development of domain and information model for IoT systems. [6M]  
b) What are basics should be considered in functional view modeling in detail. [6M]

UNIT-V

9. a) What effect will the IoT have on our daily lives? [6M]  
b) Explain applications of IoT in home automation systems. [6M]

(OR)

10. a) How IoT system is beneficial in industrial sector? Mention some of the IoT based Components used in industry. [6M]  
b) Write note on: Wearable - Smart Cities- Smart Home – Smart HealthCare- Agriculture - Smart Grid [6M]

\* \* \* \* \*