

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY GURAJADA VIZIANAGARAM
IV B. Tech I Semester Advanced Supplementary Examinations March 2025
CONCEPTS OF INTERNET OF THINGS

(Open Elective)

Time: 3 hours

Max. Marks: 70

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

UNIT-I

1. a) Explain advantages and disadvantages of an IoT. [7M]
b) Discuss about the layers in IoT Architecture. [7M]
(OR)
2. a) Discuss about different types of IoT applications and provide examples of how IoT is applied in various industries. [7M]
b) Explain how application-layer protocols are used for communication in IoT systems. [7M]

UNIT-II

3. a) Describe the IoT/M2M architecture and how each layer functions. [7M]
b) Explain the role of communication technologies in IoT systems. [7M]
(OR)
4. a) Summarize in detail IoT data management and handling of business processes. [7M]
b) Discuss about ZigBee IP and how do they connect to application layer services. [7M]

UNIT-III

5. a) Explain about Lightweight M2M communication Protocol. [7M]
b) Explain about XMPP communication Protocol. [7M]
(OR)
6. a) Explain the applications of SOAP and how does the SOAP message code and sent. [7M]
b) Describe the features of object exchange using HTTP request /response? [7M]

UNIT-IV

7. a) Distinguish between descriptive Analytics and predictive Analytics. [7M]
b) Describe the protocols and standards used for device integration in IoT? [7M]
(OR)
8. a) Discuss about the data acquiring and storage. [7M]
b) Define integration and explain its implementation. [7M]

UNIT-V

9. a) Describe the role of cloud computing in IoT applications? [7M]
b) Explain about IoT Cloud-based data collection using Xively. [7M]
(OR)
10. a) Analyze the importance of cloud computing in providing remote access and control of IoT devices? [7M]
b) Discuss about advantages and disadvantages of cloud computing. [7M]
