

Enrolment No. _____

National Forensic Sciences University
School of Cyber Security and Digital Forensics
Course Name: M.Tech AI_DS (Batch: 2024-25)
Semester - 2 Exam: MID (MAR – 2025)

Subject Code: CTMTAIDS SH P4

Time: 3:30 PM to 5:00 PM

Subject Name: Intelligent Systems and Security

Date: 25-Mar-2025

Q.1 Answer the following questions in short (attempt all) [20 Marks]

1. What is a Smart City and what are its main objectives?
2. Explain the role of Cloud Services like Things Speak in IoT.
3. What is the purpose of IoT gateways?
4. Describe the concept of edge computing in IoT.
5. Describe one application of smart healthcare in a Smart City.
6. How can Smart City technologies improve the quality of life?
7. Describe one way in which IoT technology enhances transportation.
8. List characteristic of IoT network.
9. Explain the frequency bands used in Wi-Fi technology and their significance.
10. How Education method can be change in Smart City?

Q.2 Answer the following questions in short (any 4) [20 Marks]

1. Draw the IoT Protocol Stack. What are the challenges of IoT.
2. Identify research areas that complement the Internet of Things (IoT) and explain their relevance
3. What are the features of RFID.
4. Explain 4 IoT Protocol connection models.
5. What are some challenges faced by Smart Cities in implementing IoT technology?

Q.3 Answer the following in detail (any 1) [10 Marks]

1. Explain the architecture of MQTT

OR

2. AI framework in Smart City.
