National Forensic Sciences University
School of Cyber Security and Digital Forensics

Course Name: M.Sc. Cyber Security (Batch: 2021-23)
M.Sc. DFIS (Batch: 2021-23)

Subject Code: CTMSCS SIII P2/CTMSDF SIII P2 **Semester - III** **Time:** 11.30 am to 01.00 pm
Subject Name: IoT Security & Forensics **Date:** 23-11-2022
Exam: Mid Semester Examination (NOV - 2022)

Q1. Answer the following questions in short. (Attempt any 5) **[25 Marks]**

1) What is IoT system? Explain its different components.
2) Draw a neat diagram of IoT architecture and elaborate data processing layer.
3) Explain node types and its behaviour in WSN.
4) Enlist IoT challenges and explain security and standardization in detail.
5) What are the major components of MQTT protocol? Explain its working in detail.
6) Differentiate zigbee and z-wave protocols.

Q2. Answer the following questions in detail. (Attempt any 2) **[16 Marks]**

1) Explain M2M in detail with its working and its comparison with IoT.
2) Write a note on Software Defined Network and its integration with IoT.
3) Enlist the standard protocols used in IoT and describe 6LowPAN and Bluetooth in detail.

Q3. Answer the following question in brief. (Attempt any 9) **[09 Marks]**

1) Give the name of sensor types according to the its data type.
2) Name the backend services used for IoT system.
3) Which characteristic can be measured by ultrasonic sensor? de Biomagnetic
4) What is drift of gathered data from sensor?
5) How communication model is useful in IoT?
6) What is source node in WSN? Sensor
7) At which layer of architecture, LLC is working? 3rd
8) What is piconet?
9) XMPP provides for the _____ residing locally or across a network.
10) _____ is used as multilevel wildcard for subscription at more than one level of hierarchy in MQTT communication.