## School of Computing Science and Engineering

Department of Computing Science and Engineering

Mid Term Examination

Exam Date: 29 Sep 2023 Time : 90 Minutes Marks : 50

> Sem VII - CSIO4701 - Privacy and Security in IoT Your answer should be specific to the question asked Draw neat labeled diagrams wherever necessary

> > K2 (4)

- Summarize the key components of a cryptographic security K2 (2) framework for IoT systems
- 2) What is the role of authentication and authorization mechanisms for K1 (3) smart devices in the IoT?
- <sup>3)</sup> What are the security concerns in IoT applications?
- 4) Discuss security requirements in IoT architecture, focusing on K<sup>2</sup> (6) enabling technologies and their significance.
- <sup>5)</sup> Discuss the use of digital signatures in ensuring data integrity and <sup>K3 (6)</sup> authenticity in IoT communication.
- 6) Compare and contrast different types of IoT attacks, their <sup>K3 (9)</sup> methodologies, and countermeasures.
- 7) Discuss the role of transport encryption in securing IoT data K4 (8) communication against various attacks.
- 8) Develop a detailed plan to address authentication and authorization K4 (12) challenges for diverse IoT smart devices.

OR

Design an attack-resilient security architecture for IoT, incorporating <sup>K4 (12)</sup> measures to protect against specific threats.