## Faculty of Engineering, University of Jaffna Department of Computer Engineering EC5070 – Database Systems

Lab - 03

Date: 15 Sep 2022 Time: 8.00 to 11.00

## **Intended Learning Outcome:**

By the end of this laboratory, Apply the fundamental concepts in data modeling with specific reference to the ER models

## Instructions:

- Any plagiarized work will be given 0 marks.
- Submit your answers as a zip file named LAB03\_20YYEXXX (20YYEXXX Your Registration Number) on/before the given deadline via teams.
  - 1. You are requested to draw an ER diagram manually with the following assumptions. After that you need to take a photo and submit before the given deadline.
    - Each vehicle uniquely defined by vehicle number, engine chassis number, types, number of wheels, production country, color, price and an associated owner.
    - Each owner has a NIC number, first name, last name, phone, and profession.
    - An owner can have one or more vehicles.
    - Agents represent owners in the sale of a vehicle. An agent can list many vehicles, but only one agent can list a vehicle.
    - An agent has a unique agent number, name, phone number and an associated office.
    - When an owner agrees to list a vehicle with an agent, a commission and a selling price are determined.
    - An office has office identifier, phone number, the manager name, address and an optional agent number.
    - Many agents can work at one office.
    - A buyer entity type has ID number, first name, last name, phone, preferences for the vehicle type, and a price range.
    - An agent can work with many buyers, but a buyer works with only one agent.