



**COMSATS University Islamabad, Lahore Campus**  
**Department of Electrical and Computer Engineering**

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**Assignment 01 – Fall 2024**

Course Title:	Database Systems - I	Course Code:	CSC371	Credit Hours:	4(3,1)
Course Instructor:	Modassir Ishfaq	Programme Name:	BCE –		
Semester:		Batch:		Section:	
				Date:	
Duration:	01 Day	Maximum Marks:			10
Student's Name:		Reg. No.			

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**Question**

A Country Bus Company owns a number of busses. Each bus is allocated to a particular route, although some routes may have several buses. Each route passes through several towns. One or more drivers are allocated to each stage of a route, which corresponds to a journey through some or all of the towns on a route. Some of the towns have a garage where buses are kept and each of the busses are identified by the registration number and can carry different numbers of passengers, since the vehicles vary in size and can be single or double-decked. Each route is identified by a route number and information is available on the average number of passengers carried per day for each route. Drivers have an employee number, name, address, and sometimes a telephone number

You are tasked to develop a conceptual design for the company and for that, you have to:

1. Identify all entities that need to be modeled. [1 Mark]
2. Identify all possible relationships between these entities [3 Marks]
3. Identify attributes that may have an impact on the overall system [2 Marks]
4. Develop an ER diagram that visualizes above entities and their attributes along with relationships. [4 Marks]