

## Lab-02 Weekend Paper

EEI4366 / EEX4366 – Data Modelling and Database Systems

Bachelor of Software Engineering Honours / Bachelor of Technology

Department of Electrical and Computer Engineering

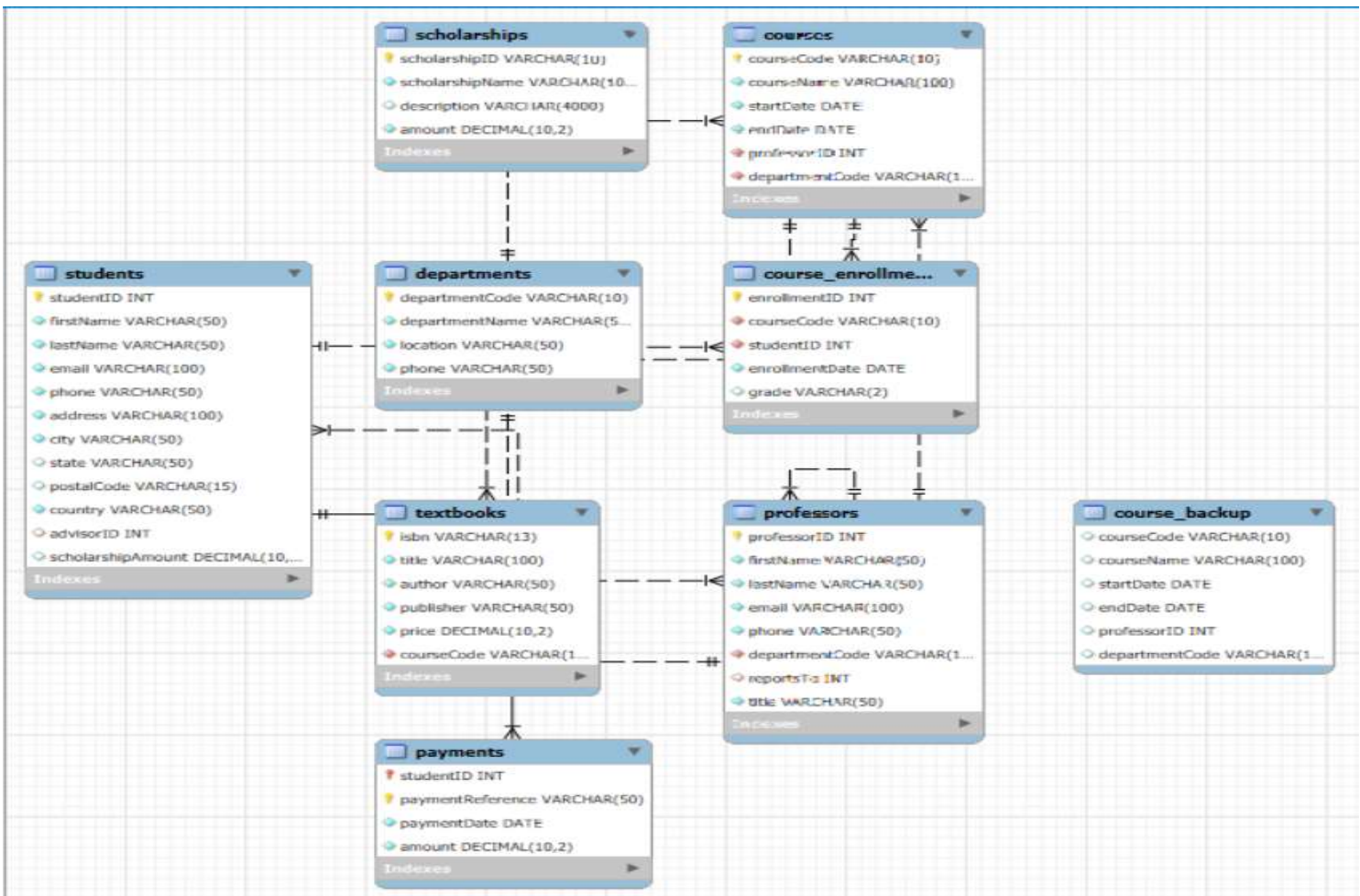
The Open University of Sri Lanka

Academic Year – 2023/24

Duration: 2 hours – On 6<sup>th</sup> Oct 9.00 – 11.00 AM

### Instructions:

1. Add the question number along with your registration number and student number as comments at the beginning of each SQL query. <Example: #Q1 – 22440559 – s00001>
2. You need to add screenshots of all the SQL queries to a word file along with the result set (where necessary), convert the word file to a pdf and **upload the pdf** and your **sql script** file to the dropbox.
3. Both SQL script file and the pdf file need to be renamed giving your registration number as the file names.
4. You need to prepare the word file during the test and additional time for file preparation will not be given. Extra 5 minutes will be provided after the lab test **only to upload your answers**.
5. Any cases where plagiarism / copying is identified you will be getting Zero marks. Therefore, DO NOT share your code with anyone. Both the copies of a copied assignment will be given zero marks.



**Use “MySQL Workbench” to perform the following operations.**

- You will be provided with a sql script file with the database “University\_DB”.
- Run the SQL statements provided (create database, tables and insert data) to get the database with tables and data stored.
- Open a new SQL tab to execute queries by first running the USE statement.

**Execute the following queries on the given database.**

1. Create a view named CS\_Professors to display details of all the professors who work in the ‘Computer Science’ department.
2. Create a view named Student\_Info to display the full name (first name and last name combined), email, phone, and the city of all students.
3. From the view Student\_Info, obtain details of all students living in 'New York'.
4. Create a view named Course\_Enrollments\_Details that displays the student name, course name, and grade for each enrollment.
5. From the view Course\_Enrollments\_Details, obtain the details of students who are enrolled in 'Introduction to Programming'.
6. Obtain the number of students enrolled in 'Introduction to Programming'.
7. Create a table named Course\_Backup and a trigger insert\_course\_backup to copy course details whenever a new record is added to the courses table. (show create backup & create trigger separately)
8. Insert new values into the courses table and observe automatic insertion into Course\_Backup.
9. Create a trigger delete\_course\_backup to delete corresponding rows from Course\_Backup when a course is deleted from the courses table.
10. Delete values from the courses table and observe the values getting deleted automatically from Course\_Backup. (show two queries separately)

*\*For following the given instructions, clarity of the code and giving comments as instructed will be given 10 marks.*