Database Design & SQL -2023S

Student ID :

Student Name :

Practical Exercise 5_6_7_8

Design a complete Entitity Relation Diagram (ERD) for the following scenario

The following gives the specific requirements for a University .

1. There are many academic sections in the university. Each academic section is recorded with academic section Id, name and long name.

2. Each academic section offers many units; each unit is recorded with unit Id, unit code, name, credit and the academic section that offers the unit.

3. One unit can be offered in many teaching periods. Each teaching period is recorded with teaching period Id, year, teaching period of the year, start date,end date, break start date and break end date.

4. Each person is recorded with person Id, password, family name, given name,title, email and date of birth.

5. Each student is recorded with student Id, student type (i.e. international or local).

6. One staff works for an academic section. We record their staff Id, office, phone and the academic section they work for.

7. The database also records what units a student is enrolled in, and the grade and mark a student gains in each unit.

The following explanation will assist you to understand the ER design:

☐ An academic unit may be a school, a department.

☐ An academic offers many units.

☐ One staff works for only one academic unit.

☐ A unit may be offered in many teaching periods.

☐ There is only one unit coordinator of a unit offered.

** State any assumptions (if any)

Practical Activity #1

1. Identify the Entities Related to the Above Problem

Practical Activity #2

2. Identify mandatory and optional attributes (if any)

Practical Activity #3

3. Write the Relationship Matrix

Practical Activity #4

4. Draw the complete ERD

Note:

Use Software Tool to Draw the ERD . But Upload the PDF as explained

Add last 3 digits to entities e.g Unit -> Unit_[999]

Include your name and student number in the ERD

Include all the Attributes and Relationships with all the required details as expalined in

the class

Mention any Assumptions (if any)