Lab 2

Discussion

Q1.   Define business rules and discuss the importance of business rule. Provide some examples.

Q2.   Discuss entity integrity. Provide an example of entity integrity.

Q3.   A relational table is a two-dimensional table that composed of rows and columns. What are the key characteristics of a relational table?

Q4.   A data model is a simple representation of complex real-world data structures. Name the basic building blocks of a data model.

Q5.   What is foreign key? What is the purpose of having a foreign key?

Q6.   Explain the THREE different types of relationship within relational database.

Q7.   Given the following two tables, what will be the results of these relational algebra operations?

Table1

Code	CourseName	Credit
TCP1101	Programming	4
TIS1001	Computer	4
TMT1001	Algebra	4
MGT2102	Business	2

Table2

Code	CourseName	Credit
TMT1001	Algebra	4
MGT2102	Business	2
ECO4300	Economic	2

(a) **SELECT** CourseName where credit is equal to 4 from Table1

(b) Table1 **UNION** Table2

(c) Table1 **DIFFERENT** Table2

(d) Table1 **INTERSECT** Table2

Q8. Given the following tables, what are the results of the following operations?

Table A

StudID	LecID
S1	L1
S1	L2
S1	L3
S1	L4
S2	L1
S2	L2
S3	L2
S4	L2
S4	L4

Table B1

LecID
L2

Table B2

L2
L4

Table B3

L1
L2
L4

(a) A **DIVIDE** B1

(b) A **DIVIDE** B2

(c) A **DIVIDE** B3

Part B: IBM DB2 (Self-Learning)

1. Create a database, connect to the database, followed by a table to store the rows of Table1. If time permits, discuss with your tutor on the suitable data types for Table1 based on the sample data.