



NATIONAL OPEN UNIVERSITY OF NIGERIA
14/16 AHMADU BELLO WAY, VICTORIA ISLAND, LAGOS
SCHOOL OF SCIENCE AND TECHNOLOGY
JUNE/JULY EXAMINATION

COURSE CODE: CIT843

COURSE TITLE: DATABASE MANAGEMENT SYSTEMS

TIME ALLOWED: 2 Hours

INSTRUCTION: Answer Any Four Questions

- 1a. What is Data Modeling? 6 marks
- b. Why is Data Modeling important?
5 ½ marks
- c. List three characteristics of a good data model.
6 marks
- 2a. Write appropriate SQL statement for each of the following:
- i. To create a PRIMARY KEY constraint on the "P_Id" column when the table is already created.
4 ½ marks
- ii. To create a FOREIGN KEY on the "P_Id" column when the "Orders" table is created. 4 ½ marks
- iii. To select only the persons with the first name equal to "Tove" AND the Last name equal to "Syendson" 4 ½ marks
- iv. To select the persons with a last name equal to "Hansen" or "Pettersen" from the Persons table
4 marks
- 3a. Explain what is meant by DDBMS.
5 marks
- b. List the four main dimensions on which DDBMS are classified.
8 marks
- c. What is database security? 4 ½ marks
- 4a. Outline the basic steps in designing a database application.
10 marks
- b. State how to ensure database security at design level.
7 ½ marks

5a. Write SQL statement that grants authorization to database users shown in the table below; 12

marks

b. Write SQL statement that revokes authorization granted to Mr. Sola 5 ½ marks

Subject	Object	Action	Constraint
Rasheed	Employee	Read	None
Rasheed	Employee	Insert	None
Rasheed	Employee	Modify	None
Rasheed	Employee	Delete	None
Bola	Employee	Read	Salary < 50,000
Sola	PurchaseOrder	Insert	Total < 1,000
Sola	PurchaseOrder	Modify	Total < 1,000
Chidi	Employee	Read	None

6. Explain the following E-R Modeling Constructs with an example each:

- | | |
|------------------|-----------|
| i. Entity | 4 ½ marks |
| ii. Relationship | 4 ½ marks |
| iii. Attributes | 4 ½ marks |
| iv. Identifiers | 4 marks |

