



NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF SCIENCE
2022/2 SEMESTER EXAMINATIONS

CIT843: DATABASE MANAGEMENT SYSTEMS

COURSE UNIT: 2

TIME: 2 HRS

Answer Question1 and ANY OTHER TWO questions.

Q1. COMPULSORY (30 marks)

- a) Briefly explain what a **relational** database is. (10 marks)
- b) Describe the salient features of a database management system is. (10 marks)
- c) Give a brief definition of metadata. (5 marks)
- d) Write down five main database objects found in a typical Microsoft access database. (5 marks)

Q2. (20 marks)

- a) Write short notes on the following: (10 marks)
 - i. Data Manipulation Language
 - ii. Structured Query Language
 - iii. Data Definition Language
 - iv. Primary Key
 - v. Foreign Key
- b) List 5 characteristics of a DBMS (10 marks)

Q3. (20 marks)

- a) Using a suitable block diagram describe the components of a database system. (15 marks)
- b) List FIVE popular database management software packages (5 marks)

Q4. (20 marks)

- a) Write short notes on the following: (12 marks)
 - i. Database Schema
 - ii. Data Model
 - iii. *Database Instance*
- b) Write down the main functions of a database language. (8 marks)

Q5. (20 marks)

- a) Briefly explain the role of indexes in a database. (8 marks)
- b) Briefly describe the components of a data model: (12 marks)