



National Open University of Nigeria
14/16 Ahmadu Bello Way, Victoria Island, Lagos.

School of Science and Technology
October, 2013 Examination

Course Code: CIT 844
hrs

Time Allowed: 2½

Course Title: Advanced Database Management System

Course Unit: 2 Credits

Total mark is 100 and each question carries 25 marks

Answer 4 Questions.

1a. Explain what a Database is? (4 marks)

1b. List and explain any three (3) security measures used to protect database. (9 marks)

1c. Mention three (3) advantages of database (9 marks)

2a. What is an open source? (7 marks)

2b. List three advantages of open source software. (9 marks)

2d. Mention any three network topology (9 marks)

3a. Write short note on the following:

- (i) Data Integrity
 - (ii) Data Security
 - (iii) Data Privacy
- (4 marks each)

3b. Differentiate between a centralized and distributed database systems (8 marks)

3c. Explain what encryption is? (5 marks)

4a. What is a Transaction? (5 marks)

4b. Give the full meaning of the following acronyms:

- (i) OODBMS
 - (ii) ORDBMS
 - (iii) GIGO
 - (iv) DDL
 - (v) SDLC
 - (vi) PC
 - (vii) DBMS
- (2 mark each)

4c. Identify any three database models (6 marks)

5a. What is SQL? (5 marks)

5b. List any five (5) operators and their description in SQL.
(10 marks)

5c. List five (5) failures that could make the DBMS require recovery
(10 marks)

6a. Explain what Relational Database is? (7 marks)

6b. Differentiate between Single User and Multiple User (8 marks)

6d. Outline four (4) maintenance activities by the database administrator.
(8 marks)