



NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS
SEPTEMBER/OCTOBER 2015 EXAMINATION

SCHOOL OF SCIENCE AND TECHNOLOGY

COURSE CODE: CIT 844

COURSE TITLE: Advanced Database Management System(2 Credits)

Answer 4 Questions in 2^{1/2} Hours.

Total Mark is 70 and each question carries 17^{1/2} Marks

- 1a. What is SQL? List three (3) uses (8 marks)
- 1b. List any five (5) SQL commands. (5 marks)
- 1c. Mention three (3) causes of data loss from database. (4^{1/2} marks)

- 2(a) Explain the term “Open Source Software”. List three (3) advantages. (8 marks)
- 2(b) Identify five (5) Relational Algebraic operations(5 marks)
- 2(c). Mention any three network topology (4^{1/2} marks)

- 3(a) With the aid of diagram, Describe steps involved in Database design process (7 marks)
- 3(b) Identify the difference between XML and HTML (6 marks)
- 3(c) Mention three (3) responsibilities of the Scheduler for implementing a particular strategy for concurrency control. (4^{1/2} marks)

- 4(a) What is data mining? List three (3) data mining functions (7 marks)**
- 4(b) Write short note on the following:
 - (i) Security Measures in Database
 - (ii) Backup and Recovery Procedures in Database
 - (iii) Operational Procedures in Database(2 marks each)
- 4(c) Identify three basic update operations on relations (4^{1/2} marks)

- 5a. What is Distributed Database? (8 marks)
- 5(b) Identify five (5) criterion for DBMS and object-oriented system (5 marks)
- 5(c) List three (3) advantages of data distribution (4^{1/2} marks)

- 6(a) Define Digital Libraries and differentiate it from traditional library (7 marks)

6(b) Identify and explain three (3) forms of Authorizations on part of the database.(6 marks)

6(c) Outline three (3) demerits of data distribution.(4¹/₂ marks)