



NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND, LAGOS
SCHOOL OF SCIENCE AND TECHNOLOGY
JANUARY/FEBRUARY 2013 EXAMINATION

CIT 843 - DATABASE MANAGEMENT SYSTEMS
Instruction: Answer Any Four Questions
Time Allowed: 2 Hours

- 1a. What is DBMS?** 7 ½ marks
b. List five disadvantages of File Processing System. 5 marks
c. State five advantages of DBMS. 5 marks
- 2a. Describe the three levels of data abstraction.** 9 marks
b. What is data independence? Outline the two types. 6 marks
c. What is a view? 2 ½ marks
- 3a. Explain what is meant by:**
normalization
functional dependency 8 marks
b. Define SQL and state the primary difference between SQL and other conventional programming languages. 5 marks
c. What is 2NF? 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 grant authorization to database users shown in the table.** 12 marks
b. Write SQL statement that revoke authorization granted to Mr. Sola 5 ½ marks

Subject	Object	Action	Constraint
Rashed	Employee	Read	None
Rashed	Employee	Insert	None
Rashed	Employee	Modify	None
Rashed	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 SQL transaction terms:**
Lost update problem 5 marks
Dirty read 5 marks
Non-repeatable read 3 marks
Phantom read 4 ½ marks