NATIONAL OPEN UNIVERSITY OF NIGERIA
University Village, Plot 91, Cadastral Zone,
Nnamdi Azikiwe Expressway, Jabi, Abuja

FACULTY OF SCIENCES
APRIL, 2019 EXAMINATION

Course Code: **CIT843**
Course Title: Introduction to Database Management System
Course Credit Unit: 2
Time Allowed: 2 Hours
Instruction: Answer Question 1 and any other three questions

Question 1
    (a) State two merits and demerits of Traditional Mainframe Architecture   (6 marks)
    (b) What are the three features that could be used to describe metadata   (3 marks)
    (c) What do you understand by Foreign Key Domain?   (3 marks)
    (d) Enumerate four limitation of file-based system   (4 marks)
    (e) Briefly discuss the following: (6 marks)
        (i) Values Are Atomic
        (ii) The Sequence of Columns is Insignificant
        (iii) File and Printer Server
    (f) Explain "Non-repeatable read" in SQL transaction   (3 marks)

Question 2
    (a) Critically explain the roles of database administration in Database Security System? (6 marks)
    (b) Describe the four main rules that Authorization should take into account?   (9 marks)

Question 3
    (a) Briefly describe four kinds of action queries   (6 marks)
    (b) Write down the twelve (12) steps required in creating Append Query?   (9 marks)
Question 4
    (a) Discuss the concept of Open Database Connectivity (ODBC)   (10 marks)
    (b) State five advantages of a Database Management System (DBMS)   (5 marks)

Question 5
    (a) Data integrity is enforced in the relational model by **entity** and **referential** integrity rules.
        Critically compare Entity Integrity and Referential Integrity   **(8 marks)**
    (b) Explain the concept of generalization hierarchy in relation to database management**(7 marks)**