COURSE CODE: CIT 844

TITLE: ADVANCED DATABASE MANAGEMENT SYSTEMS

CREDIT: 2 CREDIT UNITS

TIME ALLOWED: 2HRS.

INSTRUCTION: ANSWER QUESTION ONE (1) AND ANY OTHER THREE (3)

QUESTION 1 (25 marks) Compulsory
   A. In a database environment, transactions have two main purposes. Discuss **(4 marks)**
   B. Highlight at least three (3) examples of data mining technologies (6 marks)
   C. Differentiate between network transparency and local autonomy (4 marks)
   D. Describe multimedia databases (4 marks)
   E. Give two (2) examples of multimedia databases (2 marks)
   F. Explain data replication in a distributed database (5 marks)

QUESTION 2 (15 marks)

   A. Differentiate between database security and Integrity (2 marks)
   B. Compare and contrast between a malicious and an accidental loss of data (4 marks)
   C. Describe data visualization (3 marks)
   D. Absolute protection of the database from malicious abuse is not possible, but the cost of the perpetrator can be made sufficiently high to deter most if not all attempts to access the database without proper authority. List and explain at least 3 points of security measures which can be taken to protect the database (6 marks)

QUESTION 3 (15 marks)
   A. How does the concept of 'authorization and view' enhance database security? (5 marks)