CIT 744 – Advanced Database Management System
TIME ALLOWED: $2^1/_2$ Hours.

Answer 4 Questions

1a. What is Relational Database? (6 marks)
1b. Describe and explain the database design process.(16 marks)
1c. What is one of the significant advantages of using databases?(3 marks)

2a. What is SQL? (5 marks)
2b. List any five (5) operators and their description in SQL. (10 marks)
2c. Mention the causes of data loss from database. (10 marks)

3a. What is a database catalogue system? (5 marks)
3b. Write short note on the following:
   (i)   Dead lock
   (ii)   Data recovery
           (7 marks each)

3c. Mention two (2) basic features for transaction recovery. (6 marks)
4a. What is a Transaction? (6 marks)
4b. Discuss the properties of database transactions.(10 marks)
4c. Mention three (3) responsibilities of the Scheduler for implementing a particular strategy for concurrency control.(9 marks)

5a. What is a Distributed Database? (7 marks)
5b. List and explain any three (3) security measures used to protect database. (9 marks)
5c. List three(3) disadvantages of distributed database. (9 marks)

6a. Explain four advantages of Object Oriented Database Management System. (8 marks)
6b. List and explain three advantages of distributed database. (12 marks)
6c. What is the difference between distributed and centralized database. (5 marks)

7a. What is data warehouse? (6 marks)
7b. List three advantages of Open Source software. (9 marks)
7c.Explain multimedia database and it's types. (10 marks)