

**C 56973**

**Name**.....

**Reg. No**.....

**SECOND SEMESTER M.Sc. DEGREE EXAMINATION, JULY 2009**

Computer Science

CS 202 DATABASE MANAGEMENT SYSTEMS

(2005 admissions)

Time : Three Hours

Maximum : 80 Marks

**Part A**

*Answer any **five** questions.  
Each question carries 8 marks.*

1. Explain the purpose of Database systems.
2. Explain the basic concepts of network model.
3. Explain the various keys applicable to the relational model.
4. What are the fundamental operations involved in relational algebra ?
5. Discuss the problems encountered in concurrency.
6. What is object-oriented model ? Explain.
7. What is middleware ? How is it useful for distributed computing ?

(5 x 8 = 40 marks)

**Part B**

*Answer any **four** questions.  
Each question carries 10 marks.*

8. Draw the ER diagram for the Banking enterprise. Explain.
9. List the design goals for relational databases and explain why each is desirable.
10. What is entity integrity and referential integrity ? Explain.
11. Write SQL statements using ANY, ALL, =, subqueries and join operations.
12. Describe UML.
13. Explain distributed query processing in detail.

(4 x 10 = 40 marks)