IV Semester Int. M.C.A. Examination, February/March 2010
RDBMS

Duration : 3 Hours Max. Marks: 100

Instructions: *1) Answer **all** questions in Part **A**, **5** out of 8 questions in Part – **B**, and **4** out of 6 questions in Part – **C**.*
*2) PART – **A**: Questions from **1** to **8** carry **1** mark **each** and **9** to **14** carry **2** marks **each**.*
*3) PART – **B**: **Each** question carries **8** marks.*
*4) PART – **C**: **Each** question carries **10** marks.*

PART – A

1. What is a database ?
2. Define tuple.
3. What is cardinility ?
4. What is functional dependence ?
5. Define distributed database.
6. What is redundancy ?
7. What is query ?
8. What is a deadlock ?
9. Write any three drawbacks of using file system to store data.
10. What are the three views of data ?
11. State any 2 advantages of SQL.
12. What is Data Fragmentation ?
13. What is DML ? What are the types of DML ?
14. What is Query Processor ?

PART – B

1. What is a Key ? Explain types of Keys.
2. Explain Two-pass Algorithms based on hashing.
3. Explain storage and buffer management.
4. What are Client Server Applications ?
5. Explain locking systems with different lock modes.
6. Explain any 5SQL commands with example.
7. Explain BCNF and 3rd normal forms.
8. Explain multi-valued dependencies and join dependencies.

PART – C

1. What is data model ? Explain data models with example each.
2. What is entity relationship model ? Explain the elements of E-R model.
3. Explain the three level architecture of DBMS.
4. Explain transaction management and transaction processing.
5. Explain the set operations on relations.
6. Describe storage, buffer management and transaction processing.