

D 13031

Name

Reg. No.

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, FEBRUARY 2006

Computer Science

CS 303—DATABASE MANAGEMENT SYSTEMS

Time : Three Hours

Maximum : 60 Marks

Part A

*Answer any **five** questions.
Each question carries 3 marks.*

1. Differentiate between data definition language and data manipulation language.
2. What is an entity ?
3. **Describe** a primary key.
4. Write briefly about Cartesian product in relational algebra.
5. Write briefly about selection operation in relational algebra.
6. Describe read-lock.
7. How can the transactions be protected against crashes ?

(5 x 3 = 15 marks)

Part B

*Answer any **three** questions.
Each question carries **15** marks.*

8. (a) Explain the level of abstraction in a DBMS. (8 marks)
(b) Write notes on representation of E-R diagram in the network model. (7 marks)
9. (a) Explain various operations on relational database. (8 marks)
(b) Differentiate between Domain Relational calculus and **Tuple** relational calculus. (7 marks)
10. (a) Compare **hierarchial** model and network model. (8 marks)
(b) Compare BCNF and 3NF. (7 marks)
11. (a) Write notes on Generalized dependency. (8 marks)
(b) Describe **multivalued** dependency. (7 marks)

[3 x 15 = 45 marks]