

**A 223**

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2005.

Third Semester

Computer Science and Engineering

CS 234 — DATA BASE MANAGEMENT SYSTEMS

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define data base schema.
2. What are the responsibilities of DBA?
3. Define the term tuple.
4. What is the difference between primary key and foreign key?
5. What is functional dependency?
6. What are the desirable properties of decomposition?
7. Define transaction.
8. Define view in SQL?
9. Define Object relational data bases.
10. Mention few applications of data warehousing.

PART B — (5 × 16 = 80 marks)

11. (i) Discuss the characteristics of relation and that make them different from ordinary tables and files. (6)
- (ii) Discuss the entity integrity and referential integrity constraints. Why are they important? Explain them with suitable examples. (10)

12. (a) (i) What are the important requirements of a data base system?  
(ii) What is meant by a schema? Distinguish between external, conceptual and internal schemas.

Or

- (b) (i) Explain the data manipulation languages and data description languages in detail.  
(ii) Explain the data dictionary in detail.
13. (a) (i) Discuss the various relational operations with suitable examples.  
(ii) Write a detailed note on embedded SQL.

Or

- (b) (i) What is meant by recursive relationship type? Give some examples of recursive relationship types.  
(ii) Explain nested query statements using SQL with a suitable example.
14. (a) (i) Discuss the convention for displaying an ER schema as an ER diagram.  
(ii) Why is a relation that is in 3 NF generally considered good? Define BCNF with an example.

Or

- (b) (i) What is meant by complex selection? Explain its implementation with suitable example.  
(ii) Write a detailed note on Hashing.
15. (a) (i) Illustrate states of Transaction.  
(ii) Write a detailed note on concurrency control.

Or

- (b) (i) What is a commercial data base system? Discuss it in detail.  
(ii) Write a detailed note on Data mining and distributed data bases.