

**III B.Tech II Semester Supplementary Examinations, April/May 2005
DATA BASE MANAGEMENT SYSTEMS**

**(Common to Computer Science & Engineering, Computer Science &
Systems Engineering and Electronics & Computer Engineering)**

Time: 3 hours

Max Marks: 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. (a) Explain the drawbacks of traditional file processing systems with examples.
(b) Explain the three levels of data abstraction.
2. Explain the various types of aggregate functions with suitable examples in SQL.
3. Discuss the difference between index sequential and hashed file organizations. Compare their storage and access efficiencies. List the applications where each of the file organization is suitable.
4. Discuss the implementation of a select operation. Explain the processing mechanism by means of an example.
5. (a) Discuss about cost of sort-merge join.
(b) Describe conjunctive normal form and explain why it is important in the context of relational query evaluation.
6. (a) Explain the difference between weak entity and strong entity set? How to represent the strong entity and weak entity set through ER-diagrams
(b) The State Bank of India offers the five different types of accounts : loan, checking, recurring deposits, locker accounts and fixed deposit. . The Bank has a number of branches and a client of the bank can open many accounts. A account can be joint and more than one client may operate an account. Identify the entities , attributes what relationships exist among these entities and Tables. Draw the corresponding E-R diagram
7. (a) Explain Two phase locking with algorithms.
(b) What is Transaction? In what ways is it different from an ordinary program (Like 'C').
8. (a) What are different Recovery Techniques used in Transaction Failures?
(b) Explain how System Crash and Media Failure occurs?
