

**II B.Tech I Semester Regular Examinations, November 2007**  
**DATA BASE MANAGEMENT SYSTEMS**  
**( Common to Computer Science & Engineering, Information Technology**  
**and Computer Science & Systems Engineering)**

**Time: 3 hours**

**Max Marks: 80**

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

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1. (a) Why would choose a database system instead of simply storing data in operating system files ? When would it make sense not to use a database system?  
(b) What is logical data independence and why is it important? [8+8]
2. (a) What is a relational database query? Explain with an example.  
(b) What are the SQL constructs to modify the structure of tables, views and to destroy the tables and views? [8+8]
3. (a) Explain different Binary Operations? [9]  
(b) For the following relational database, give the expressions in SQL. branch\_schema (branch\_name, branch city, assets) customer\_schema (customer name, customer street, customer city) Loan\_schema (branch name, loan\_number, amount) Borrower\_schema (customer name, Loan number) Account\_schema (branch name, account\_number, balance) Depositer\_secham (Customer name, account\_number)
  - i. find the names of all customers whos street address include substring 'Main' [2]
  - ii. Find average balance for each customer who lives in Harrison and at least three accounts? [3]
  - iii. . Find all customer who have a loan at bank whose names are neither ?smith? non ?jones'? [2]
4. (a) What is Normalization?give types of normalization  
(b) What are the advantages of normalized relations over the un normalized relations? [8+8]
5. (a) What are the list of actions transaction can perform on a database objects. Explain with suitable schedule. [8]  
(b) What are the transaction isolation Levels in SQL. [8]
6. (a) What are the merits & demerits of using fuzzy dumps for media recovery. [6]  
(b) Explain the phases of ARIES Algorithm. [4]  
(c) Explain 3 main properties of ARIES Algorithm [6]
7. Explain about Variable-Length file organization with an example. [16]

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**Set No. 4**

8. What are the causes of bucket overflow in a hash file organization? What can be done to reduce the occurrence of bucket overflows? [16]

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