May 2006
CS - 305
DATA BASE MANAGEMENT SYSTEM
(B.Tech Semester 5th 2056)

Time : 03 Hours **Maximum Marks : 60**

Note : Section- A is compulsory. Attempt any Four questions from section - B. Attempt any two questions from Section- C.

Section A

Q1 (a) Define the term dangiling pointer?
(b) Define the term generalization ?
(c) List any two procedural programming languages ?
(d) What are row triggers ?
(e) What is cascading roll back ?
(f) Defined the term Dead Lock.
(g) Define the term DDL.
(h) What is query optimization?
(i) What are ACID properties ?
(j) define the term Relationship.

Section B

Q2. Every weak Entity Set can be converted to a strong entity by simply adding appropriate fields, Why then do we have weak entity sets ?
Q3) Describe major advantages of a Database system over file system.
Q4) Consider the following Database.
Employee (person_name, street, city)
Works (person_name, company_name, salary)
Manager(person_name, manager_name)
Company(company_name, city)
(a) Find the name of employees who work for first bank corporation
(b) Find the names of all employees who earn more than $ 10000 per annum
Q5) Explain why 4 NF is a more desirable normal form than BCNF
Q6) Explain various recovery techniques based on deferred update.

Section C

Q7) Discuss relational approach of database management system. Explain with the help of suitable relational operation to demonstrate insert, delate and update function.
Q8) Construct an E-R diagram for a university management system for each class, include the instructor, the enrollment and time and place of the class meeting. For each students class pair a grade is recorded also design a relation database for the said E-R diagram.
Q9) Write short note on the following.
1) Seralizability of schedules.
2) Granting and revoking of privileges.
3) Granuality of data items.