May 2007
CS - 305
DATA BASE MANAGEMENT SYSTEM
(B.Tech, Semester 5th 2057)

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 program Data Independence.

(b) Explain the Physical Design phase of database design process?

(c) What does role name signify? Explain with example?

(d) Distinguish between super key and primary key using a suitable example.

(e) Discuss the mechanism of altibute/ relationship inheritance. Why it is useful?

(f) What is a view in SQL? Write syntax to create a view?

(g) What is meant by the closure of set of functional dependencies?

(h) What is meant by revoking privileges? Write full syntax.

(i) Discus the situations when a transection is Roll back and how ?

(j) When two conflicts are said to be conflict equivalent ? Give an example.

Section B

Q2: Differentiate between menu based interface and form based interface.

Q3 Describe the several types of attributes occur in E-R model.

Q4 Describe the various reasons that read to occurrence of NULL values in relation.

Q5 Describe UNDO and REDO operations and the recovery techniques that use each.

Q6 Discuss the types of privileges at the account level and those at the relation level.

Section C

Q7 How does the granularity of data affect the performance of concerrency control? Explain multiple granularity level locking in detail?

Q8 (a) Illustrate the characteristic of a relation.

(b) Solve the given Queries in SQL using following databases.

emplye (frame, name, SSN, Salary. D No. Super SSN)

department(Dname, DNumber, MGRSSN, MGRSTART DATE)

(a) Illustrate a ternary relationship using suitable example.

(b) What is a minimize set of functional dependencies? Does every set of dependencies have a minimal equivalent set?