Exam.Code:0923
Sub. Code: 6846

1078
B.E. (Information Technology)
Fifth Semester
ITE-541/531: Database Management Systems

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt _five_ questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I. Define the following terms:-

   a) Entity

   b) Data independence

   c) Concurrency control

   d) DDL

   e) Self join

   f) Schedule

   g) Normalization

   h) Exception handling

   i) Referential key

   j) Minus in SQL   (10x1)

UNIT – I

II. a) Discuss the components of DBMS.

   b) Explain various data models   (5,5)

III. a) Draw an E-R diagram for student teacher relationship.

   b) Explain third normal form with example.   (5,5)

IV. Explain the concept of serializability with its different types with example.   (10)

UNIT – II

V. a) Explain various aggregate functions in SQL with example.

   b) Explain the concept of Views, Grant and revoke with example.   (5,5)

VI. Write a program using commit and rollback in PL/SQL.   (10)

P.T.O.

VII.   a) Explain cursors with its different types.

b) Discuss select and project operators with respect to relational algebra and calculus with example.   (5,5)

x-x-x