7E 4171

Roll No. _____ [Total No. of Pages : 3

7E 4171

B.Tech. VII Semester (Back) Examination, Nov./Dec. - 2015
Electrical Engineering
7EE1(O) DataBase Management System
Common With EX

Time : 3 Hours

Maximum Marks : 80
Min. Passing Marks : 24

Instructions to Candidates:

*Attempt any **five** questions, selecting one question from **each unit**. All questions carry equal marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.*

Unit - I

1. a) Explain the role of Key's in DBMS with the help of example **(8)**

   b) What are the Benefits of ER Modeling and explain with the help of an example how ER modeling is done. **(8)**

OR

1. a) Explain Composite Attribute also mention the differences between Composite and multivalued attributes **(10)**

   b) Explain Relational data model in detail **(6)**

Unit - II

2. a) Define Normalization with its requirement in DBMS **(6)**

   b) With the help of appropriate example.Explain all the forms of Normalization in detail **(10)**

OR

2. a) What are the differences between physical and logical databases? Explain with the help of example. **(8)**

b) Explain Natural join operator and select operator with relation to relational Algebra with the help of example. **(8)**

Unit - III

3. a) What is the difference between SQL and Embedded SQL **(6)**

b) Consider the following structure

Column Name	Data Type	Size
S.No.	Varchar 2	5
Name	Varchar 2	24
Address	Varchar 2	28
Pin code	Number	6
Balance	Number	20,2

Perform the following operations for the above structure.

i) Create a Client master table for the structure

ii) Display all entries in the table

iii) Insert an entry in the table. Show with an example

iv) Delete the client whose balance is less then 1000

v) Rename the table **(10)**

OR

3. Write short notes on.

a) Stored Procedures

b) Triggers

c) Database security

d) JDBC **(4×4)**

Unit - IV

4. Explain hash functions with its types in detail? What are the problems arises in hash file organization and what are the solutions? Explain **(16)**

OR

4. a) Explain the differences between sequential, indexed and random files. (10)

b) Explain Inverted and multilist structures in detail. (6)

Unit - V

5. a) Explain the ACID properties in detail. (6)

b) Give reasons why concurrency occurs also give the solution to solve the concurrency problem. (10)

OR

5. a) Explain log based Recovery system in detail. (6)

b) What are the advantages and disadvantages of strict two phase Locking (6)

c) Define Serializablity with its types (4)
