

Exam Code: 0439
Sub. Code: 25959

2125

M.Sc. (Bio-Informatics) First Semester
MBIN-8006: Introduction to Database System

Time allowed: 3 Hours

Max. Marks: 60

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

x-x-x

I. Answer the following:-

- a) What is the difference between data and information? (1.5)
- b) What is an entity and what are its features? (1.5)
- c) What is a composite attribute? (1.5)
- d) Write an SQL statement to create a table? (1.5)
- e) What is a view? How is it different from an actual table? (1.5)
- f) How to assign value to a variable at the run time using PL/SQL? (1.5)
- g) How to add a comment in PL/SQL? (1.5)
- h) What are the basic steps to create a Visual Basic application? (1.5)

UNIT - I

II. a) Explain the three level Data Base System Architecture.

b) What is an ER diagram? Draw an ER diagram to represent the case of a software company that handles projects. The company assigns project managers and other employees to the project on an hourly basis. Define entities and their attributes to explain the case. (2x6)

III. a) What are the characteristics of relational data models?

b) Write note on following terms related to relations:-

i) Degree, Cardinality

ii) Connectivity

(2x6)

UNIT - II

IV. a) Explain different data integrity constraints used in SQL.

b) Explain how to alter a table to perform the following:-

(i) add a column

(ii) remove a column

(iii) add a constraint

(2x6)

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(2)

- V. a) What are the joins and their types? Explain with related SQL statement syntax and example.
- b) What are the various privileges and permissions available in SQL? Explain how to grant and revoke these privileges to a user. (2x6)

UNIT - III

- VI. a) Consider a table Employee (Emp_id, Emp_name, Date_of_joining, Designation, Salary, Department). Write a PL/SQL program to display the details of the employee with maximum salary.
- b) Explain various Mouse related events and Key-board related events in Visual Basic. (2x6)
- VII. a) What are the exceptions and their types in PL/SQL? Explain how the exceptions are handled in PL/SQL.
- b) Discuss the role of user defined function in visual basics? Write a function which accepts two integer numbers and returns the largest among given two numbers. (2x6)

x-x-x