Relational Database Management System (CA509S)

Unit-I

5 marks

1. Explain the purpose of database systems.
2. Define DBMS. Write in detail about data abstraction.
3. Define (i) Instance (ii) Schemes
4. What is Data Independence. Explain its types.
5. Write in detail about the tasks of Database Administrator.

10 marks

1. Explain briefly about Data Models.
2. Explain about the Overall System Structure of the Database.

Unit-II

5 marks

1. Write a note on Entity.
2. What are attributes? Explain its types.
3. What is mapping constraints? Explain.
4. Write a short note on keys.
5. Write in detail about ER diagrams.
6. Write a short notes on (i) Generalization (ii) Aggregation

10 marks

` 1 . How will you reduce E-R diagrams to tables?

Unit-III

5 marks

1. What is normalization? Why it is important?
2. Write in detail about fourth normal form.
3. Write in detail about Boyce Codd normal form.

10 marks

1. Explain about various normal forms.
2. Explain about first normal form and second normal form.

Unit-IV

5 marks

1. What is Primary Key Constraint? Explain it.
2. How will you represent a foreign key constraint? Explain it.
3. List and explain the Aggregate functions.
4. Write a short notes on subqueries.

5. Explain about the SET operations.
6. What is an index? Explain.

10 marks

1. List the DDL and DML commands and explain with examples.
2. Write in detail about Integrity Constraints.
3. Write in detail about various types of built in functions?
4. Explain various types of Joins.

Unit-V

5 Marks

1. Explain the structure of PL/SQL program.
2. How does a Procedure is used in a PL/SQL program? Give an example.
3. How does a Function is used in a PL/SQL program? Give an example.
4. Write a PL/SQL program to find a factorial of a given number.
5. Write a PL/SQL program to do arithmetic operations on two numbers.
6. Write a PL/SQL program to find the area of the square on given value.

10 Marks

1. Write in detail about the Cursors concept in PL/SQL.
2. Explain about packages in PL/SQL.
3. Write in detail about Triggers in PL/SQL.
4. Explain about the Exception Handling mechanism in PL/SQL.