**DBMS Unit-1 Questions**

1. Explain advantages of DBMS over file processing systems.

L2 CO1 12Marks

1. What do you mean by data model? Explain different types of data models. L1 CO1 12Marks
2. Illustrate and discuss about the database system architecture.

L2 CO1 12Marks

1. Define data independence and describe the three levels of architecture.

L1 CO1 12Marks

1. Construct E-R diagram for registrar office of university which stores the data about:

i) Student (Sid, name, branch)

ii) Course offering (time, section, course, title)

iii) Instructor (id, name, dept, title)

iv) Course (syllabus, credits, course, and title)

Each courses offering provides the grades to the student who are enrolled with that course. Give the appropriate mapping constraints.

L3 CO1 12Marks

1. What are the functions of database administrator? Explain in detail.

L1 CO1 12Marks

1. Explain representation of class hierarchy with example.

L2 CO1 12Marks

1. Illustrate the limitation of E-R model and explain aggregation with example model. L2 CO1 12Marks
2. Explain the steps required for designing the database.

L2 CO1 12Marks

1. Explain about the relational calculus. L1 CO1 12Marks

**DBMS unit-2 Questions**

1. Explain integrity constraints over relations. L2 CO2 12Marks
2. Explain about set operations in relational algebra. L2 CO2 12Marks
3. Why joins are introduced and explain types of joins in relational algebra.

L1 CO2 12Marks

1. Explain union, intersect, except operations in SQL with example.

L2 CO2 12Marks

1. Explain aggregate operators and group by, having clause with examples.

L2 CO2 12Marks

1. What do you mean by trigger and illustrate trigger with example.

L1 CO2 12Marks

1. Explain selection projection, rename and division operations.

L2 CO2 12Marks

1. Explain nested queries and use IN, NOT IN, EXISTS, NOT EXISTS with example. L2 CO2 12Marks
2. How do you compare null values and explain complex integrity constraints in SQL. L1 CO2 12Marks
3. Explain set comparison operators-ANY, ALL and compare the results.

L2 CO2 12Marks

**DBMS unit-3 Questions**

1. Write a note on Normalization. L1 CO3 6Marks
2. What is the purpose of schema refinement? L1 CO3 6Marks
3. Describe the process of normalization. L2 CO3 6Marks
4. What is the concept behind functional dependency? L1 CO3 6Marks
5. Define Normal forms. List out the normal forms. L1 CO3 6Marks
6. Describe a short note on decomposition. L2 CO3 6Marks
7. Explain about schema refinement. L2 CO3 6Marks
8. Define functional dependency with example. L1 CO3 6Marks
9. Describe partial and full functional dependency. L2 CO3 6Marks
10. Explain 1st Normal form with example. L2 CO3 6Marks