Question	Marks	Unit No
Define DBMS and explain its advantages over traditional file processing systems.	5	1
Explain the three levels of data abstraction in DBMS with examples.	5	1
Describe the components of a DBMS with a neat diagram.	5	1
Discuss the concept of data independence and its types.	5	1
Explain the types of data models used in DBMS.	5	1
What are ER diagrams? Explain their components with examples.	5	1
Convert the given ER diagram into a relational schema.	5	1
Explain the concept of primary key, foreign key, and candidate key with examples.	5	1
Discuss the advantages of using a multi-user DBMS architecture.	5	1
Explain the concept of data constraints with suitable examples.	5	1
Describe the role of system catalogs in DBMS.	5	1
What are the Codd's rules? Explain their significance.	5	1
Compare and contrast hierarchical, network, and relational data models.	5	1
Define attributes, entities, and relationships in DBMS with examples.	5	1
Explain how a MySQL database can be used to create a student information system.	5	1
Define DBMS and list its applications.	3	1
What is data abstraction?	3	1
List the advantages of DBMS over file processing systems.	3	1
What are the components of a DBMS?	3	1
Explain the concept of data independence.	3	1
What are the different types of data models?	3	1
List the key components of an ER diagram.	3	1
What is a primary key?	3	1
Define foreign key with an example.	3	1
What is a candidate key?	3	1
Define multi-user DBMS architecture.	3	1
What is a system catalog?	3	1
What are Codd's rules?	3	1
What is a relational model?	3	1
Define attributes and domains.	3	1
Define data abstraction.	2	1
What is data independence?	2	1
List any two advantages of DBMS.	2	1
Define an entity in DBMS.	2	1
What is an attribute?	2	1
List the types of data constraints.	2	1
What is a relational schema?	2	1
Define a primary key.	2	1
What is the role of a system catalog?	2	1
Define data constraints.	2	1
What is a relationship in DBMS?	2	1
Define a candidate key.	2	1
What are the three levels of data abstraction?	2	1
What is the difference between logical and physical data independence?	2	1
Define data redundancy.	2	1
Explain the characteristics and advantages of SQL.	5	2

Describe the DDL and DML commands in SQL with examples.	5	2
Explain the concept of views in SQL. How are they created and updated?	5	2
Discuss the use of aggregate functions in SQL with examples.	5	2
Explain nested queries and their usage with examples.	5	2
What are stored procedures? Explain with a MySQL example.	5	2
Explain the concept of triggers in SQL and their practical applications.	5	2
What is programmatic SQL? Explain embedded and dynamic SQL.	5	2
Discuss the use of tuple variables in SQL queries with examples.	5	2
Explain the importance of set operations in SQL with examples.	5	2
Write a query to create a student database and demonstrate SQL Insert and Update.	5	2
What is ODBC? Explain its importance in SQL.	5	2
Explain the role of SQL operators in query construction.	5	2
What are indexes in SQL? Explain their usage.	5	2
Describe the clauses used in SELECT queries.	5	2
What is SQL?	3	2
List the advantages of SQL.	3	2
What is a view in SQL?	3	2
Define aggregate functions in SQL.	3	2
What are stored procedures?	3	2
What is a trigger in SQL?	3	2
Define programmatic SQL.	3	2
What are tuple variables?	3	2
Define set operations in SQL.	3	2
What is ODBC?	3	2
List the types of SQL operators.	3	2
What are indexes in SQL?	3	2
What is the SELECT query?	3	2
Define nested queries.	3	2
What is a dynamic SQL?	3	2
What is DDL?	2	2
What is DML?	2	2
Define a view in SQL.	2	2
What is an aggregate function?	2	2
What is a nested query?	2	2
What is a trigger?	2	2
What is a stored procedure?	2	2
What are SQL operators?	2	2
Define a SELECT query.	2	2
What is ODBC?	2	2
What is dynamic SQL?	2	2
Define an index.	2	2
What is the role of SQL in databases?	2	2
List any two set operations.	2	2
What is a tuple variable?	2	2
Explain the purpose of normalization in database design.	5	3
Discuss the concept of functional dependencies with examples.	5	3
Explain 1NF, 2NF, and 3NF with suitable examples.	5	3

What is BCNF? How does it differ from 3NF?	5	3
Explain the process of query optimization in DBMS.	5	3
Discuss the measures of query cost in query processing.	5	3
Explain the significance of selection and join operations in query processing.	5	3
What is normalization?	3	3
Define functional dependencies.	3	3
What is 1NF?	3	3
What is 2NF?	3	3
What is query optimization?	3	3
Define selection operation in DBMS.	3	3
What is query cost?	3	3
Define BCNF.	2	3
What is 3NF?	2	3
What is query processing?	2	3
What are update anomalies?	2	3
What is redundancy in databases?	2	3
Define join operation.	2	3
What is a relational expression?	2	3