



UNIT-I			
S.No	Question	Bloom's Level	Marks
1	Explain the architecture of centralized database systems. Discuss advantages and limitations.	L2	10 M
2	Describe Client–Server architecture and explain two-tier and three-tier models.	L2	10 M
3	Discuss server system architectures and compare transaction servers and data servers.	L4	10 M
4	Explain Parallel Database Systems and their importance in large-scale data processing.	L2	10 M
5	Describe different types of parallelism and explain I/O parallelism with examples.	L2	10 M
6	Explain the role of parallelism in multicore processors in database systems.	L4	10 M
7	Discuss design issues in Parallel Database Systems such as partitioning and load balancing.	L4	10 M
8	Differentiate between Intra-operation and Inter-operation Parallelism with examples.	L4	10 M
9	Explain Query Optimization in Parallel Databases and discuss techniques used.	L4	10 M
10	Explain different network types used in distributed and parallel databases.	L4	10 M



UNIT- II			
S.No	Question	Bloom's Level	Marks
1	Explain the architecture of Distributed Database Systems. Discuss advantages and challenges.	L2	10 M
2	Differentiate between Homogeneous and Heterogeneous Distributed Databases with examples.	L4	10 M
3	Explain Distributed Data Storage techniques such as fragmentation, replication, and allocation.	L4	10 M
4	Describe Distributed Transactions and issues in maintaining consistency.	L4	10 M
5	Discuss Concurrency Control techniques in Distributed Databases.	L4	10 M
6	Explain the concept of Availability and fault tolerance in Distributed Databases.	L2	10 M
7	Discuss challenges in Heterogeneous Distributed Databases and schema integration.	L5	10 M
8	Explain Cloud-Based Databases and their architecture.	L4	10 M
9	Discuss Directory Systems and their types in distributed databases.	L4	10 M
10	Explain deadlock handling techniques in Distributed Databases.	L4	10 M



Unit-III			
S.No	Question	Bloom's Level	Marks
1	Explain Decision-Support Systems (DSS). Discuss their role in modern organizations.	L2	10 M
2	Describe the architecture of a Data Warehouse. Explain its components in detail.	L2	10 M
3	Differentiate between OLTP and Data Warehousing systems.	L4	10 M
4	Explain the concept of Data Mining. Discuss its importance in knowledge discovery.	L2	10 M
5	Describe Classification in Data Mining. Explain different classification techniques.	L4	10 M
6	Explain Association Rule Mining. Discuss support and confidence with examples.	L4	10 M
7	Discuss different types of association rules in data mining.	L4	10 M
8	Explain the process of Knowledge Discovery in Databases (KDD).	L4	10 M
9	Differentiate between Classification and Clustering with suitable examples.	L4	10 M
10	Discuss real-world applications of Data Mining and Data Warehousing in decision making.	L5	10 M



UNIT-IV			
S.No	Question	Bloom's Level	Marks
1	Explain the concept of Object-Based Databases. Discuss their features and advantages.	L2	10 M
2	Describe Complex Data Types in databases with suitable examples.	L2	10 M
3	Explain Structured Types and Inheritance in SQL with examples.	L4	10 M
4	Discuss Table Inheritance in SQL. How does it support object-oriented concepts?	L4	10 M
5	Explain Array and Multiset Types in SQL with examples.	L3	10 M
6	Describe Object Identity and Reference Types in SQL.	L4	10 M
7	Compare SQL and NoSQL databases with suitable examples.	L4	10 M
8	Discuss Persistent Programming Languages and their role in databases.	L2	10 M
9	Explain Object-Relational Mapping (ORM). Discuss its advantages and limitations.	L4	10 M
10	Explain the architecture and working of MongoDB.	L4	10 M



UNIT- V			
S.No	Question	Bloom's Level	Marks
1	Explain the motivation behind XML. Discuss its advantages over traditional data formats.	L2	10 M
2	Describe the structure of XML data. Explain elements, attributes, and XML tree structure.	L2	10 M
3	Explain XML Document Schema (DTD and XML Schema). Compare their features.	L4	10 M
4	Discuss querying and transformation of XML data using XQuery and XSLT.	L4	10 M
5	Describe different techniques for storage of XML data in databases.	L4	10 M
6	Explain Active Database Concepts. Discuss the role of triggers with suitable examples.	L4	10 M
7	Explain XML Application Program Interfaces (APIs). Compare their architecture, working, and applications.	L4	10 M
8	Describe Temporal Database Concepts. Explain valid time and transaction time.	L4	10 M
9	Explain Spatial Database Concepts. Discuss spatial data types and queries.	L4	10 M
10	Explain Deductive Database Concepts. Discuss the role of rules, facts, and inference mechanisms with suitable examples.	L4	10 M