

PSN COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous Institution Affiliated to Anna University)
Melathediyoor, Tirunelveli-627152

Department of Computer Science and Engineering



QUESTION BANK

Degree/Branch : B.E/CSE
Semester : VI
Subject Code/Title : 503201/ Advanced Database Technology
Programming Regulation: 2018
Academic Year: 2022- 2023(EVEN)

Prepared By :A.Siva, AP/CSE

Subject Name: Advanced Database Technology

Class : III CSE

Subject Code:503201

Semester :VI

Unit– I - Database Architectures and Models

Multiuser DBMS architectures-Teleprocessing-File-Server Architecture-Traditional Two-Tier Client-Server Architecture-Three-TierClient-Server Architecture-NTier

Architectures–Relationalmodel:Terminologies-Commercial RDBMSs: Office Access and Oracle Object-Based Data Models -Record-Based DataModels –Physical DataModels-ConceptualModeling- Functions of a DBMS

Part–A(Two Marks)

Q. No	Question	BTLevel*	Competence*
1	Define the term DBMS.	B1	Understand
2	List the characteristics of DBMS.	B2	Remember
3	Write the applications of DBMS.	B2	Remember
4	Define the term file-server architecture.	B1	Understand
5	Define Teleprocessing.	B1	Understand
6	List the guidelines need for Transaction processing monitors.	B2	Remember
7	What you meant by relational model.	B2	Remember
8	List the types of DBMS architecture.	B1	Understand
9	What is meant by Multiuser DBMS architecture?	B2	Remember
10	List the terminologies of Relational database.	B1	Understand
11	Define Commercial RDBMS.	B1	Understand
12	List the characteristics of Commercial RDBS.	B4	Analyze
13	Highlight the drawbacks of Commercial RDBMS.	B4	Analyze
14	Define Microsoft office Access.	B1	Understand
15	Define the term object in Database.	B1	Understand
16	List the types of object based data models.	B1	Understand

Part–B (16Marks)

Q. No	Question	BT Level*	Competence*
1	Discuss about any four of Multiuser DBMS architecture.	B4	Analyze

2	Describe about the characteristics and applications of DBMS.	B2	Remember
3	Describe in details about the file server architecture.	B2	Remember
4	Illustrate in details about the Terminologies of relational database.	B1	Understand
5	Discuss in details about the object based and record based data models.	B1	Understand
6	Explain in details about the functions of a DBMS.	B3	Apply
7	Briefly explain about the Conceptual modeling.	B3	Apply
8	Discuss in details about the Commercial RDBMS.	B1	Understand

Unit– II - Distributed Databases

Introduction–Overview of networking–Functions and architectures of a DDBMS–Distributed relational database design–Transparencies in a DDBMS–Date’s twelve rules for a DDBMS–Distributed transaction management–Distributed concurrency control–Distributed dead lock management–Distributed database recovery-distributed query optimization

Part–A(Two Marks)

Q. No	Question	BT Level*	Competence*
1	What is meant by Networking?	B2	Remember
2	Write any four functions of a distributed DBMS.	B1	Understand
3	What is transparency in Distributed database?	B2	Remember
4	Write the advantages of Distributed DBMS.	B1	Understand
5	List any four functions of Distributed DBMS.	B2	Remember
6	Define Distributed relational database.	B1	Understand
7	What is meant by Transparency?	B2	Remember
8	State the need of client-server architecture of DDBMS	B2	Remember
9	What is meant by peer-to-peer computer Architecture?	B2	Remember
10	Mention the importance of transaction support in DBMS.	B3	Apply
11	Define the term concurrency control.	B6	Create
12	Mention the need of concurrency control.	B4	Analyze
13	What is meant by Time-stamping in DBMS?	B1	Understand
14	Highlight the importance of Timestamp ordering	B4	Analyze
15	Mention the need of Advanced Transaction Models.	B4	Analyze
16	What you meant by multilevel transaction model?	B4	Analyze
17	What is deadlock detection in DBMS?	B2	Remember

18	Define the term timestamp in DBMS.	B1	Understand
19	Mention the importance of transaction support in DBMS.	B4	Analyze
20	Highlight the need of Timestamp ordering in DBMS.	B2	Remember

Part–B(16 Marks)

1	Describe in details about the importance of networking in DBMS.	B2	Remember
2	Explain the features of Distributed DBMS..	B4	Analyze
3	Discuss about the functions of Distributed DBMS.	B1	Understand
4	What is meant by Transparency? Explain about the types of transparencies.	B3	Apply
5	Explain the features of distributed transaction management.	B4	Analyze
6	i) Briefly explain about the importance of concurrency control. ii) Discuss the properties of Transaction in Advanced database.	B5	Evaluate
7	Discuss the importance of transferances in Distributed DBMS.	B1	Understand
8	Describe in details about the distributed deadlock management.	B2	Remember

Unit– III - Transaction Management

Transaction Support - Properties of Transactions- Concurrency Control- Need for Concurrency Control-Time stamping Methods-Multiversion Timestamp

Ordering-AdvancedTransactionModels-MultilevelTransactionModel-DeadlockDetection.

Part–A(Two Marks)

Q.N	Question	BTLevel*	Competence*
0			
1	Mention the importance of transaction support in DBMS.	B1	Understand
2	Define the term concurrency control.	B1	Understand
3	Mention the need of concurrency control.	B4	Analyze
4	What is meant by Times -tamping in DBMS	B1	Understand
5	Highlight the importance of Timestamp ordering.	B1	Understand
6	Mention the need of Advanced Transaction Models.	B2	Remember
7	What you meant by multilevel transaction model?	B1	Understand
8	What is deadlock detection in DBMS?	B4	Analyze
9	Define the term timestamp in DBMS.	B1	Understand
10	List the advantages of Timestamp methods.	B2	Remember

11	Mention the importance of transaction support in DBMS.	B1	Understand
12	Highlight the need of Timestamp ordering in DBMS.	B2	Remember
13	Mention the importance of Deadlock detection in Database.	B1	Understand
14	Highlight the merits of Deadlock detection in dbms.	B2	Remember
15	What is meant by advanced transaction model?	B1	Understand
16	Mention the importance of Multilevel transaction model.	B1	Understand

Part-B(16 Marks)

1	Explain in details about the importance of concurrency control.	B1	Understand
2	Discuss the importance of time stamping methods.	B1	Understand
3	Describe about the time stamp ordering in Advanced database.	B2	Remember
4	Discuss the need of Deadlock detection in DBMS.	B2	Remember
5	Explain the term Advanced transaction model in details with needed diagram.	B1	Understand
6	Discuss in details about the multilevel transaction models.	B1	Understand
7	Discuss the properties of the transaction.	B1	Understand
8	Explain the importance of Multilevel Timestamp ordering.	B1	Understand

Unit- IV - Web Database

Introduction to Internet and Web-The Web-Scripting languages-Common Gateway Interface-HTTP cookies-Extending the Web Server-Java-Microsoft Web platform-Oracle Internet platform.

Part-A(Two Marks)

Q. No	Question	BTLevel*	Competence*
1	What is meant by internet in DBMS.	B1	Understand
2	Mention the role of web in the DBMS.	B2	Remember
3	Define the term Script.	B2	Remember
4	Mention the importance of scripting language in DBMS.	B1	Understand
5	List the advantages of scripting languages in DBMS.	B2	Remember
6	What is meant by Common Gateway Interface?	B1	Understand
7	Highlight the importance of CGI in DBMS.	B2	Remember
8	List the advantages and disadvantages of CGI.	B3	Apply
9	Define the term HTTP Cookies.	B1	Understand

10	How is HTTP Cookies support in Database?	B3	Apply
11	What is meant by the Extending the web server?	B1	Understand
12	Mention the role of web server in advanced data base.	B1	Understand
13	Highlight the need of Java in advanced database.	B2	Remember
14	Write few lines about the Microsoft Web platform.	B3	Apply
15	Mention the importance of Microsoft Web platform.	B1	Understand
16	Highlight the need of Oracle Internet platform in DBMS.	B2	Remember

Part–B(16 Marks)

1	Explain in details about the importance of internet in the DBMS.	B1	Understand
2	Discuss in details about the role of Web in the DBMS.	B1	Understand
3	Explain the features of Scripting Languages in DBMS.	B3	Apply
4	Discuss the importance of Common Gateway Interface in the database.	B1	Understand
5	Explain the role of HTTP Cookies in DBMS.	B1	Understand
6	Elaborate about the importance of Extending web server in Database.	B3	Apply
7	Describe in details about the Microsoft web platform.	B6	Create
8	Explain the importance of Oracle web platform in DBMS.	B1	Understand

Unit– V - Advance Database Applications

Mobile Database:Architecture-Transaction Management-Temporal

Databases-Active-Databases:Architecture-Rule Triggering-Deductive Data bases-Text Databases-Application.

Part–A(Two Marks)

Q. No	Question	BTLevel*	Competence*
1	What is meant by mobile database?	B1	Understand
2	List any four features of database.	B2	Remember
3	What are the parties involved by the mobile database?	B1	Understand
4	State the limitations of Mobile database.	B2	Remember
5	Define the term Database transaction.	B1	Understand
6	Mention any three features of Transaction management.	B1	Understand
7	Define the term temporal database.	B1	Understand
8	List the types of temporal databases.	B2	Remember
9	Write few lines about the features of temporal database.	B6	Create
10	What is meant by Active database?	B1	Understand
11	Mention any three merits of the active database.	B1	Understand

12	Write few lines about the importance of Triggering in database.	B6	Create
13	List the types of trigger in database.	B2	Remember
14	What is meant by deductive database?	B1	Understand
15	Mention the features of Deductive database.	B1	Understand
16	Highlight the basic notations of deductive database.	B2	Remember
17	What are the specifications of Deductive database?	B1	Understand
18	Mention the importance of Text databases.	B1	Understand
19	What are the three measures of Text Retrieval?	B1	Understand
20	List the types of advance database applications.	B2	Remember

Part–B(16 Marks)

1	Explain in details about the importance of Mobile database.	B1	Understand
2	Give short notes on the transaction management in databases.	B2	Remember
3	Describe in details about importance and features of temporal databases.	B2	Remember
4	Demonstrate the need of Active databases in database technology.	B3	Apply
5	Illustrate the importance of triggering in database with suitable example.	B3	Apply
6	Explain in details about the features of deductive databases in advanced database.	B1	Understand
7	Explain the importance of Text databases in database technology.	B1	Understand
8	Describe in details about the need of Advanced database applications in databases	B2	Remember