

(B) Answer the Following: [10]

1. Explain how Two Phase Commit Protocol Works? How it handles the failure? Compare Two Phase Commit Protocol with Three Phase Commit Protocol. [8]
2. When is it useful to have replication or fragmentation of data? Explain your answer. [2]

Q-2 Answer the Following: (Any Three) [15]

1. List approaches of Distributed Database to store relation and explain each.
2. Explain Architecture of Centralized System.
3. Describe the benefits and drawbacks of pipelined parallelism.
4. Explain Single Lock Manager and Distributed Lock Manager Locking Protocol.

Q-3 Answer the Following: (15)

1. Discuss the relative advantages of centralized and distributed databases. [5]

OR

Discuss System structure of Distributed Transactions.

2. Describe Interconnection Networks. [3]

OR

Describe local transaction and global transaction.

3. Draw Parallel Database Architectures and explain each. [7]

OR

For each of the three partitioning techniques, round-robin, hash partitioning and range partitioning, give an example of query for which that partitioning technique would provide the fastest response.

Q-4 [10]

(A)

1 Do As Directed: [6]

- a. _____ metadata contains information that gives users an easy-to-understand perspective of information stored in data warehouse.
- b. OLAP stands for _____.
- c. What is the purpose of Data Cleaning?
- d. MQE stands for Multiple Query Environment. (T/F)
- e. KDD Stands for _____.
- f. How is a Data Warehouse different from Database?

2 **Match The Following:** [4]

A	B
a. ADO	1. Represents data row from data source
b. Recordset Object	2. System Level Interface
c. OLEDB	3. Represents command executed against data source
d. Command Object	4. Application Level Interface
	5. Represents all features of connection to data source

(B) **Answer the Following:** [10]

1. Explain Architecture of Data Warehouse in detail. Write Disadvantages of Data Warehouse and Advantages of Data Warehousing.

Q-5. Answer the Following: (Any Three) [15]

1. Explain Fat Client Three Tier application model and Mutli Tier Application Model.
2. Compare OLAP with OLTP.
3. List OLAP operations. Explain any two with examples.
4. Differentiate Data Mining, Query and Reporting, Online Analytical Processing.

Q-6. Answer the Following: (Any Three) [15]

1. Define Deadlock Handling and Timestamp.
OR
Explain Types of RecordSet Object
2. Discuss Data Mart and Meta Data.
3. List Parameters of Database connection string and explain each with example.
OR
Explain Types of Lock Type Cursors.