UNIT – I  RELATIONAL MODEL ISSUES  9
ER Model - Normalization – Query Processing – Query Optimization – Transaction
Processing - Concurrency Control – Recovery - Database Tuning.

UNIT – II  DISTRIBUTED DATABASES  9
Parallel Databases – Inter and Intra Query Parallelism – Distributed Database
Features – Distributed Database Architecture – Fragmentation – Distributed Query
Processing – Distributed Transactions Processing – Concurrency Control –
Recovery – Commit Protocols.

UNIT – III OBJECT ORIENTED DATABASES  9
Introduction to Object Oriented Data Bases - Approaches - Modeling and Design -
Persistence – Query Languages - Transaction - Concurrency – Multi Version Locks –

UNIT – IV EMERGING SYSTEMS  9
Enhanced Data Models - Client/Server Model - Data Warehousing and Data Mining -
Web Databases – Mobile Databases- XML and Web Databases.

UNIT – V CURRENT ISSUES  9
Rules - Knowledge Bases - Active and Deductive Databases - Multimedia Databases-
Multimedia Data Structures – Multimedia Query languages - Spatial Databases.

TOTAL : 45 PERIODS

TEXT BOOKS:

REFERENCES:
3. C.J.Date, A.Kannan, S.Swamynathan, “An Introduction to Database Systems”,