

**UNIT I**

Distributed Databases Vs Conventional Databases – Architecture – Fragmentation – Query Processing – Transaction Processing – Concurrency Control – Recovery.

**UNIT II OBJECT ORIENTED DATABASES 10**

Introduction to Object Oriented Data Bases - Approaches - Modeling and Design - Persistence – Query Languages - Transaction - Concurrency – Multi Version Locks - Recovery

**UNIT III EMERGING SYSTEMS 10**

Enhanced Data Models - Client/Server Model - Data Warehousing and Data Mining - Web Databases – Mobile Databases.

**UNIT IV DATABASE DESIGN ISSUES 9**

ER Model - Normalization - Security - Integrity - Consistency - Database Tuning - Optimization and Research Issues – Design of Temporal Databases – Spatial Databases.

**UNIT V CURRENT ISSUES 9**

Semantic Web – Role of Meta data in web content - Resource Description Framework – RDF schema – Architecture of semantic web – content management workflow – XLANG – WSFL – BPEL4WS

**TOTAL = 45**

**TEXT BOOKS:**

1. Ron Schmelzer et al. “ XML and Web Services”, Pearson Education, 2002.
2. Sandeep Chatterjee and James Webber, “Developing Enterprise Web Services: An Architect's Guide”, Prentice Hall, 2004.

**REFERENCES:**

1. Frank P.Coyle, “XML, Web Services and the Data Revolution”, Pearson Education, 2002.
2. Keith Ballinger, “.NET Web Services Architecture and Implementation”, Pearson Education, 2003.
3. Henry Bequet and Meeraj Kunnumpurath, “Beginning Java Web Services”, First Edition, Apress, 2004.
4. Russ Basiura and Mike Batongbacal, “Professional ASP .NET Web Services”, Apress, 2003.