



**C-DAC & Gujarat Technological University**  
**M.E. Computer Engineering**  
**(Wireless Mobile Computing)**  
**Gandhinagar**

**Semester: I**

**Subject Name: Database Technologies (Elective I & II- Group 1)**

**Subject Code: 2715306**

**Course Content:**

ER Model - Normalization - Query Processing - Query Optimization - Transaction Processing - Concurrency Control - Recovery - Database Tuning  
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  
Introduction to Object Oriented Data Bases - Approaches - Modeling and Design - Persistence -  
Query Languages - Transaction - Concurrency - Multi Version Locks - Recovery  
POSTGRES - JASMINE - GEMSTONE - ODMG Model  
Enhanced Data Models - Client/Server Model - Data Warehousing and Data Mining - Web  
Databases - Mobile Databases - XML and Web Databases

**Text book:**

1. Henry F. Korth and Silberschatz Abraham, "Database System Concepts", Mc.Graw

**References Books:**

1. Elmasri Ramez and Novathe Shamkant, "Fundamentals of Database Systems", Benjamin Cummings Publishing. Company.
2. Ramakrishnan: Database Management System, McGraw-Hill
3. Gray Jim and Reuter Address, "Transaction Processing: Concepts and Techniques", Morgan Kauffman Publishers.
4. Jain: Advanced Database Management System CyberTech
5. Date C. J., "Introduction to Database Management", Vol. I, II, III, Addison Wesley.
6. Ullman JD., "Principles of Database Systems", Galgottia Publication