GUJARAT TECHNOLOGICAL UNIVERSITY
M.E. Computer Engineering
(Wireless Mobile Computing)
Semester: I

Subject Name: **Database Technologies (Elective I & II- Group 1)**
Subject Code: **715306**

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", Moragan 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