

## CE 405:DBMS - II

Teaching Scheme			Examination Scheme							
Lect	Prac	Total	Theory				Practical			Grand Total
			Int Ass	Sem End		Total	Int Ass	Sem End	Total	
				Marks	Hrs					
3	2	5	30	70	3	100	25	25	50	150

### Query Processing:

Overview , Measures of Query Cost

### Query Optimization:

Overview

### Transactions:

Transaction Concept , Transaction State , Implementation of Atomicity and Durability , Concurrent Executions , Serializability , Recoverability

### Concurrency Control:

Lock-Based Protocols , Time Stamp – Based Protocols , Multiple Granularity \* , Deadlock Handling

### Recovery System:

Failure Classification , Storage Structure , Recovery and Atomicity , Log – Based Recovery Shadow Paging

### Database System Architecture:

Centralized and Client-Server Architectures , Server System Architectures , Parallel Systems , Distributed Systems

### Distributed Databases:

Homogeneous and Heterogeneous Databases , Distributed Data Storage Distributed Transactions , Commit Protocols

### PL/SQL

### Text Book:

1. Database System Concepts : Fourth Edition  
By Silberschatz, Korth, Sudarshan.

### Reference Book:

1. An Introduction to Database Systems : Seventh Edition  
By C. J. Date
2. Sql, PL/SQL The Programming Language of ORACLE : Second Edition  
By Ivan Bayross.