

DEPARTMENT OF COMPUTER SCIENCE
ACADEMIC ACTION PLAN FOR 2011-2012
B.Com/BBM IV SEMESTER (Advanced Database Management System)

Month	Topics to be covered as per syllabus	Topics included other than state level common-core syllabus	Beyond syllabus	General Lectures/ Seminars
Nov/Dec	PHYSICAL DATABASE DESIGN AND PERFORMANCE. Physical Database Design Process. Designing Fields. Designing Physical Records and normalization. Designing Physical Files: Using and selecting Indexes. Designing Databases. Optimizing for Query Performance.	Optimizing for query performance		Seminars
	ADVANCED SQL & PL/SQL. Indexes-Views-Sequences-The generic PL/SQL block-Ensuing Transaction Integrity. What is Cursor-Error handling in PL/SQL-User-defined exception handling-Stored Procedures and Functions-Data Dictionary Facilities. SQL-99 Enhancements and Extensions to SQL. Triggers and Routines. Embedded SQL and Dynamic SQL	SQL-99 Enhancements and Extensions to SQL.		
January	TRANSACTION MANAGEMENT IN DBMS ENVIRONMENT: Transaction Management and Concurrency Control: What is transaction, Concurrency control, Concurrency control with locking Methods, Concurrency control with time stamping methods, concurrency control with optimistic methods, database recovery management.	concurrency control with optimistic methods, database recovery management.		Seminars
	Distributed Database Management Systems: The evolution of Distributed Database Management Systems, DDBMS advantages and Disadvantages, Distribution Processing and Distribution Databases, Characteristics of Distributed database management systems, DDBMS Components, Levels of Data and Process distribution, Distributed database Transparency Features, Distributed Transparency, Transaction Transparency, Performance Transparency and Query Optimization, Distributed Database Design, Client Server VS DDBMS.		Rapid DBMS versioning	
February	DATA WAREHOUSE CONCEPTS AND DATABASE ADMINISTRATION : The Data Warehouse: The need for data analysis, Decision support systems, The data warehouse, Online analytical processing, Star schemas, Data mining, SQL extension for OLAP.	SQL extension for OLAP.	Data mining concepts	Seminars
	Database Administration: Data as a Corporate asset, The need for and role of databases in an organization, The evolution of the database administration function, The database environment's Human Component, Database administration Tools, The DBA at work: Using Oracle for Database Administration.			