



C. U. SHAH UNIVERSITY – WADHWAN CITY

FACULTY OF TECHNOLOGY AND ENGINEERING DEPARTMENT OF INFORMATION TECHNOLOGY B. TECH. SEMESTER: - VI

Subject Name: Advanced Database Management System (ADM)

Subject Code : 4TE06ADM1

Teaching & Evaluation Scheme: -

Subject Code	Subject Name	Teaching Scheme (Hours)				Credits	Evaluation Scheme							
		Th	Tu	Pr	Total		Theory				Practical (Marks)			Total
							Sessional Exam		University Exam		Internal		University	
							Marks	Hours	Marks	Hours	Pr/Viva	TW	Pr	
4TE06ADM1	Advanced Database Management System (ADM)	3	0	2	5	4	30	1.5	70	3.0	-	20	30	150

Objectives:

The objectives of the course are:

- To gain the knowledge of query optimization different database models, and PL/SQL

Prerequisites:

- Basic knowledge of Database Management System

Course outline:

Sr. No.	Course Contents	Total Hrs.
1	Views: Need for views. Data definition and data manipulations of views. Update operations on views; union, intersection, difference, restriction, projection, extension and join. SQL support for views.	3
2	Optimization: Optimization process; expression transformation. Use of data base statistics. Implementing the relational operators.	08
3	Database Design Issues: Security, Integrity, Consistency, Database Tuning	10
4	Emerging Systems:	12

	Enhanced Data Models, Client/Server Model, Web Databases, Mobile Databases.	
5	Introduction to PL/SQL: SQL Commands, Query language, Procedure, Functions, Cursor, Trigger	12
	Total	45

Learning Outcomes:

At the end of this module the student will be:

- Able to use Procedure, Functions, Cursor, Trigger with different types application functionality
- Able to create different application of database

Books Recommended:

1. Fundamentals of Database Systems, 5th Edition, by **Ramez Elmasri and Shamkant B Navathe** Pearson Education (2008)
2. Database System Concepts, 6th Edition, **Abraham Silberschatz, Henry F. Korth, Sudarshan Tata** Macgraw Hill (2011)
3. An Introduction to Database Systems, 8th Editon, by **C. J. Date**, Pearson Education/Addison-Wesley(2004)
4. SQL- PL/SQL, , 2nd Edition, by **Ivan bayross**, Bpb Publications(2002)