ANURAG ENGINEERING COLLEGE

(An Autonomous Institution)

II Year B.Tech. CSE - II Sem

L	T	P	C
0	0	2	1

(CS407PC) DATABASE MANAGEMENT SYSTEMS LABORATORY

Co-requisites:

- "Database Management Systems"

Course Objectives:

The objectives of this course are to provide:

- To introduce ER data model and Relational data model
- To Design database schema for a given application and apply normalization.
- To gain knowledge of SQL commands for data definition and data manipulation.
- To understand the basics of querying.
- To develop solutions for database applications using procedures, cursors and triggers.

List of Experiments:

1. Concept design with E-R Model
2. Relational Model
3. Normalization
4. Practicing DDL commands
5. Practicing DML commands
6. Querying (using ANY, ALL, UNION, INTERSECT, JOIN, Constraints etc.)
   Nested, Correlated subqueries
7. Queries using Aggregate functions, GROUP BY, HAVING and Creation and dropping of Views.
8. Triggers (Creation of insert trigger, delete trigger, update trigger)
9. Procedures
10. Usage of Cursor

Text Books:

1. Database Management Systems, Raghurama Krishnan, Johannes Gehrke, Tata Mc Graw Hill, 3rd Edition
2. Database System Concepts, Silberschatz, Korth, McGraw Hill, V edition.

Reference Books:

1. Database Systems design, Implementation, and Management, Peter Rob & Carlos Coronel 7thEdition.

2. Fundamentals of Database Systems, Elmasri Navrate, Pearson Education
3. Introduction to Database Systems, C.J. Date, Pearson Education
4. Oracle for Professionals, The X Team, S. Shah and V. Shah, SPD.
5. Database Systems Using Oracle: A Simplified guide to SQL and PL/SQL, Shah, PHI.
6. Fundamentals of Database Management Systems, M. L. Gillenson, Wiley Student Edition.

Course Outcomes:

Upon the successful completion of this course, the student will be able to:

1. Develop ER data model and Relational data model for a database.
2. Design database schema for a given application and apply normalization.
3. Apply SQL commands for data definition and data manipulation.
4. Apply the basics of SQL for retrieval and management of data.
5. Develop solutions for database applications using procedures, cursors and triggers.

CO-PO-PSO Mapping:

	PO-1	**PO-2**	**PO-3**	**PO-4**	**PO-5**	**PO-6**	**PO-7**	**PO-8**	**PO-9**	**PO-10**	**PO-11**	**PO-12**	**PSO-1**	**PSO-2**
CO-1	M	H	H	H	H	L	M						M	H
CO-2	M	H	M	M	M	M	L						M	H
CO-3	H	H	H	H	H	L	M						M	H
CO-4	M	H	H	H	M	L	M						M	H
CO-5	M	M	L	L	H	L	M						L	H

H-HIGH **M**-MODERATE **L**-LOW