



**GITAM INSTITUTE OF MANAGEMENT (GIM)**  
**Gandhi Institute of Technology and Management (GITAM)**  
**(Declared as Deemed to be University u/s 3 of UGC Act. 1956)**  
**Visakhapatnam – 45.**

<b>Course Code: MAN 329</b>	<b>Course Title: Database Management Systems</b>		
<b>SEMESTER: V</b>	<b>Course Type: Practical</b>	<b>Credits: 3</b>	
<b>Home Programme(s):BBA (Business Analytics)</b>		<b>Batch: 2020- 2023</b>	
<b>Course Leader:</b>			

### Course description and learning outcomes

Each and every organization maintains database related to their business such as employees, customers, products, sales and so on. Database management system is collection of programs that enables to store, modify and extract information from a database. SQL is the *de facto* language for communication with the database and MS Access is a simple and a popular DBMS package from Microsoft which provides the database features in GUI format.

### Learning Objectives

- Knowledge of different concepts in database and database management system
- Create database in MS Access and perform basic operations on it
- Create database in Oracle and perform basic operations in it

On successful completion of this course, students will be able to:

<b>CO</b>	<b>Learning Outcome</b>	<b>Assessment</b>
CO1	Understand different concepts in DBMS	A1
CO2	Create database in MS Access	A2,A3,A4
CO3	Write queries in SQL	A2,A3,A4
CO4	Write programs in PL/SQL	A2,A3,A4
CO5	Understand the concept of transaction management in DBMS	A1

### Course outline and indicative content

#### Unit - I: (10 sessions, CO1, L2)

**Database approach:** Features of database approach, advantages and disadvantages, Components of DBMS, Data Models - Hierarchical, Network, Relational, ER analysis, Attributes and Domains, Integrity Constraints and Keys, Normalization – 1NF, 2NF, 3NF,

#### Unit – II: (10 sessions, CO2, L3, L4, L5)

**Working with MS Access:** Creating Tables, Data Types and Fields properties in MS Access, Creating Relationships, Designing Forms for Data Entry, Queries in MS Access – Simple queries, Cross-tab queries, Reports in MS Access – Simple reports, cross tab reports - using report wizard, using query design

#### Unit - III: (10 sessions, CO3, L3, L4, L5)

**Working with SQL:** DDL statements - Create, Drop, Alter, DML statements, Insert, Select, Delete, Update, Oracle Functions, Join Condition, Set Operators, The Order By Clause

#### Unit - IV: (10 sessions, CO4, L3, L4, L5)

**Working with PL/SQL:** Control Structures, PL/SQL Block, Cursors, Procedures, Functions, Triggers

#### Unit – V: (10 sessions, CO5, L3, L4, L5)

**Query Processing and Optimization:** ACID properties, Transaction Processing and Concurrency Control - Database Recovery.

Assessment methods				
Task		Task type	Task mode	Weightage (%)
A1	Quiz	Individual		10
A2	Assignments / Lab Tasks / Written Test/Coursera Groups* or Individual	Individual / Group		20
A3	Record Work	Individual		10
A4	Lab Exam	Individual		60

### Mapping Cos – Blooms Levels – Assessment Tools

Knowledge dimension / Cognitive dimension	L1. Remember	L2. Understand	L3. Apply	L4. Analyze	L5. Evaluate	L6. Create
Factual Knowledge						
Conceptual Knowledge		CO1 (A1) CO5(A1)				
Procedural Knowledge			CO2(A3) CO3(A3) CO4(A3)	CO2(A2) CO3(A2) CO4(A2)	CO2(A4) CO3(A4) CO4(A4)	
Meta Cognitive Knowledge						

### Learning and teaching activities

Classroom Lectures, Application cases, Demonstration, Lab Sessions

### Teaching and learning resources

Computer Lab, MS Access, Oracle, Textbooks, Ebooks, Reference Materials, Web resources

### CO PO Mapping

This is to map the level of relevance of the Course Outcome (CO) with Programme Outcome (PO).

0= No Relevance; 1= Low Relevance; 2= Medium Relevance; 3= High Relevance

CO PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	Sum
	CO1	0	2	2	1	1	3
CO2	0	2	2	1	1	3	9
CO3	0	2	2	1	1	3	9
CO4	0	2	2	1	1	3	9
CO5	0	2	2	1	1	3	9
<b>Target Level Max.</b>	<b>0</b>	<b>10</b>	<b>10</b>	<b>5</b>	<b>5</b>	<b>15</b>	<b>45</b>

### Program Outcomes

1	Ability to understand the business problems with their knowledge in different functional areas of management.
2	Integrate with structured, semi – structured and unstructured data.
3	Utilize the tools such as Microsoft Excel, SPSS, R, Weka and Tableau to solve business analytics problems.

4	Ability to apply analytics techniques to analyze and interpret the data.
5	Incorporate the descriptive, predictive and prescriptive analytics.
6	Evaluate the necessary skills and understanding to take up advanced topics in the area of analytics and thus enhance their career prospects.