

Govt. Polytechnic Mandkola (Palwal)

Lesson Plan

Name of the Faculty : **Monika Gupta**
Branch : **Computer Engg.**
Semester : **3rd Semester**
Subject : **DBMS**
Lesson Plan Duration : **(From 4th Aug 2025 to End of Sem, 2025)**
Work Load per week (In hour) : **Lecture-02, Practical-04**

Week	Theory		Practical	
	Lecture Day	Topic(including assignment/Test)	Practical Day	Topic
1st	1 st	Database system: Introduction to database and its purpose	1st	Exercise on creation and modification of structure of tables
	2nd	Characteristics of database, approach, advantage and disadvantage of database system	2nd(G2)	Exercise on creation and modification of structure of tables
	3rd	Classification of DBMS users: Actors on the scene- Database Administrators, Database designers, End users– System Analyst and Application Programmers		
2nd	4th	Workers behind the scene (DBMS system designers and implementers, tools developers, operator and Maintenance personnel	3rd(G1)	Revision of Exercise on creation and modification of structure of tables
	5th	Data Models, Schemas, instances, Database state ,DBMS Architecture: External level, Conceptual level, Internal level, Mappings	4th (G2)	Revision of Exercise on creation and modification of structure of tables
	6th	Data Independence: Logical data independence and physical data independence		
3rd	7th	Database Languages, DBMS interfaces, Classification of DBMS- Centralized, Distributed, Parallel and Object Based	5th (G1)	Exercise on inserting and deleting values from tables
	8th	Data modeling using E-R Model	6th(G2)	Exercise on inserting and deleting values from tables
	9th	Data Model Classification: File Based or primitive models, traditional data Models, Semantic Data Models		

4th	10th	Entities and Attributes, Entity Types and Entity Sets, Key Attribute and domain of attributes	7th (G1)	Revision of exercise on inserting and deleting values from tables
	11th	Relationship among entities , database design with ER model	8th (G2)	Revision of exercise on inserting and deleting values from tables
	12th	Revision of 1 st , 2 nd and 3 rd unit		
5th	13th	Relational model Concepts: Domain, Tuple, Attribute, Cardinality, Relation	9th (G1)	Exercise on Querying the table using Select Command
	14th	Keys- Primary, Secondary, Foreign, Alternate. Relational Constraints and Relational Database schemes	10th (G2)	Exercise on Querying the table using Select Command
	15TH	Domain Constraints, key Constraints and Constraints on Null		
6th	16th	Relational Databases and Relational Database Schemes	11th(G1)	Revision of Exercise on Querying the table using Select Command
	17th	Entity Integrity, Referential Integrity and Foreign Key	12 th (G2)	Revision of Exercise on Querying the table using Select Command
	18th	Comparison between ER Model and Relational Model		
7th	19th	Trivial and Non Trivial Dependencies	13th(G1)	Exercise on using various types of joins
	20th	Non Loss Decomposition and Functional Dependencies	14th(G2)	Exercise on using various types of joins
	21Th	First and 2 nd normal forms		
8th	22th	Third normal form, BCNF, Denormalization	15th(G1)	Revision of Exercise on using various types of joins
	23th	Revision of unit 4	16th(G2)	Revision of Exercise on using various types of joins
	24TH	Revision of unit 5		
9th	25th	Creating and using indexes, Creating and using views	17th(G1)	Exercise on using functions provided by database package
	26th	Database security, Process controls	18th(G2)	Exercise on using functions provided by database package
	27TH	Database protection, grant and Revoke		

10th	28th	DDL: Creating tables, Creating a table with data from another table	19th(G1)	Revision of Exercise on using functions provided by database package
	29th	Inserting values into a table, Updating columns of a table	20th(G2)	Revision of Exercise on using functions provided by database package
	30TH	Deleting Rows, Dropping a table		
11th	31st	DML, Database Security and privileges, Grant and Revoke command	21st(G1)	Exercise on Grant, Revoke, Commit and Rollback
	32th	Maintaining Database objects, commit and Rollback	22nd(G2)	Exercise on Grant, Revoke, Commit and Rollback
	33RD	Various types of select commands		
12th	34th	Various types of joins, sub query	23rd(G1)	Revision of Exercise on Grant, Revoke, Commit and Rollback
	35th	Aggregate functions, Challenges of My Sql	24th(G2)	Revision of Exercise on Grant, Revoke, Commit and Rollback
	36th	Introduction to Big Data		
13th	37th	Understanding Big data with samples	25th(G1)	Design of Database for any application
	38th	Revision of Unit1	26th(G2)	Design of Database for any application
	39TH	Revision of Unit2		
14th	40th	Revision of Unit3	27th(G1)	Viva of practical no.1 to 3
	41th	Revision of Unit4	28 th (G2)	Viva of practical no.1 to 3
	42nd	Revision of Unit5		
15th	43rd	Revision of Unit6	29th(G1)	Viva of practical no.4 to7
	44th	Revision of Unit7	30 th (G2)	Viva of practical no.4 to7
	45th	Pre Exam Conduct		