Name of Faculty:Priyanka	Discipline:Computer
Semester:4th	Subject:Data Base Management System
LESSON PLAN DURATION : - 15 weeks (from Jan-2019 to May- 2019)	WORK LOAD (LECTURE/PRACTICAL) PER WEEK (IN HOURS):- LECTURE-03, PRACTIACL-03

weeks	Theory		Practical	
	Lectures/ hrs	Topics(including assisgnments & test)		Experiments
1	1	Database Systems; Database and its purpose, Characteristics of the database approach,		
			1	Exercises on creation and modification of structure of tables.
			2	
			3	
	2	Advantages and disadvantages of database systems. Classification of DBMS Users;		
	3	Actors on the scene, Database Administrators, Database Designers, End Users,		
2	4	System Analysts and Application Programmers,		
			1	Revision on practical performed
			2	
			3	
	5	Workers behind the scene (DBMS system designers and implementers,)		
	6	tool developers, operator and maintenance		
3	7	Data models, schemas, instances, data base state.		
			1	Exercises on inserting and deleting values from tables
			2	
			3	
	8	DBMS Architecture; The External level, The conceptual level, The internal level,		
	9	Mappings between levels of data model		
4	10	Data Independence; Logical data Independence, Physical data Independence.		
			1	Revision on practical performed
			2	
			3	
	11	Database Languages		
	12	Database Interface		
5	13	Classification of Database Management Systems- Centralized, Distributed,		
			1	Exercises on querying the table (using select command).
			2	
			3	
	14	Classification of Database Management Systems:parallel and object based.		
	15	Assignment Ist		
6	16	Sessional Ist		
			1	Revision on practical performed
			2	
			3	
	17	Data Models Classification; File based or primitive models		
	18	, traditional data models, semantic data models.		
7	19	Entities and Attributes, Entity types and Entity sets, Key attribute and domain of attributes,		
			1	Revision on practical performed
			2	
			3	
	20	Relationship among entities, Database design with E/R model.		
	21	Relational Model Concepts: Domain, Attributes, Tuples cardinlity,		

8	22	keys(Primary, Secondary, foreign, alternative keys) and Relations.		
			1	Exercises on using various types of joins.
			2	
			3	
	23	Relational constraints and relational database schemes; Domain constraints, Key constraints and constraints on Null.		
	24	Relational databases and relational database schemes,		
9	25	Entity integrity, referential integrity		
			1	Revision on practical performed
			2	
			3	
	26	foreign key. Comparison b/w E/R model and Relational model.		
	27	Assignment 2nd		
10	28	Sessional 2nd		
			1	
			2	
			3	
	29	Trivial and non-trivial dependencies		
	30	Non-loss decomposition and functional dependencies,		
11	31	Normalization: ist , 2nd		
			1	Exercises on using functions provided by database package.
			2	
			3	
	32	Normalization: 3rd,Bcnf		
	33	Denormalization		
12	34	Database Access and Security:Introduction		
			1	Revision on practical performed
			2	
			3	
	35	Creating and using indexes		
	36	creating and using views		
13	37	Database security, process controls,		
			1	Exercises on commands like Grant, Revoke, Commit and Rollback etc
			2	
			3	
	38	database protection,Grant and revoke		
	39	MYSQL/SQL (Structured Query Language)		
14	40	SQL DDL AND DML Commands		
			1	Revision on practical performed
			2	
			3	
	41	Database Security and Privileges,Grant and Revoke Command		
	42	Maintaining Database Objects, Commit and Rollback, various types of select commands, various types of joins, sub query, aggregate functions.		
15	43	Challenges of My SQL. Introduction to Big Data. Understanding Big Data with samples.		
			1	Design of database for any application.
			2	
			3	
	44	Assignment 3rd		
	45	Sessional 3rd		