

Lesson Planning for the semester starting w.e.f. 8.01.2019

MKM girls Polytechnic college (179), Hodal(District Palwal)

Name of the Faculty: Anjali

Discipline: Lecturer, Computer Engg.

Semester: 4th

Subject: Data Base Management System

Lesson Plan Duration: 15 weeks (from January, 2019 to April, 2019)

Work Load (Lecture/ Practical) per week (in hours): (Lectures- 03, Practical-03)

Week	Theory		Practical	
	Lecture day	Topic (including assignment/ test)	Practical day	Topic
1 st	1 st	Introduction to Database and its purpose and Introduction to Database system	1 st week	Introduction to Database and overview of the different database available and brief about MS-Access
	2 nd	Why Database and History of Database System		
	3 rd	Characteristics of the database approach And Advantages and disadvantages of database systems		
2 nd	4 th	Introduction to Conventional File System ,Concept of files ,record, data, information retrieval. , Comparison between Conventional System and Data Base System	2 nd week	Overview, Features and functionality, Application development in MS-Access
	5 th	Actors on the scene Like Database Administrators, Database Designers,		

		End Users, System Analysts and Application Programmers		
	6 th	Workers behind the scene (DBMS system designers and implementers, tool developers, operator and maintenance personnel and History of data base System		
3 rd	7 th	Revision and Assignment along with problem solving	3 rd week	Overview, Features and functionality, Application development in MS-Access- Continues
	8 th	Data architecture and models: (Physical Model, Object based Model, Record based Model Network Model, Heirachical Model)		
	9 th	schemas, sub schemas instances, data base state. Case Study of models and schemas (examples student information System)		
4 th	10 th	DBMS Architecture: Three Level of Architecures	4 th week	Exercises on different forms of select statement, altering and dropping of tables
	11 th	The External level , the conceptual level and The internal level		
	12 th	Mappings and types of mappings		
5 th	13 th	Data base Administrator and Administration	5 th week	Exercises on different forms of select statement, altering and dropping of tables-continues
	14 th	Database Management System – Advantage and Disadvantage		
	15 th	Classification of DBMS, DBMS		

		Interfaces		
6 th	16 th	Concept of centralized and Client /Server Architecture for DBMS	6 th week	Exercises on creation of tables
	17 th	Single Tier, Two Tier and Three Tier architecture		
	18 th	Data Independence		
7 th	19 th	Logical data Independence And Physical data Independence	7 th week	Exercises on creation of tables- continues
	20 th	Database Languages and Interfaces		
	21 th			
8 th	22 th	Classification of Database Management Systems: Centralized, Distributed, parallel and Object based	8 th week	Exercises on insertion of data into tables
	23 th	Data Models Classification : File based or primitive models, traditional data models, semantic data models.		
	24 th	Entities and Attributes , Entity types and Entity sets		
9 th	25 th	Key attribute and domain of attributes 3.5 Relationship among entities	9 th week	Exercises on insertion of data into tables- continues
	26 th	Database design with E/R model		
	27 th	ER Design Issues And Mapping Constraints		
10 th	28 th	Revision and Assignment along with problem solving	10 th week	Exercises on deletion of data using different conditions

	29 ^h	Relational Model Concepts		
	30 ^h	Domain, Attributes, Tuples, Cardinality		
11 th	31 ^h	Keys(Primary, Secondary, foreign, Alternative Keys etc)and Relations	11 th week	Exercises on deletion of data using different conditions- continues
	32 ^h			
	33 st	Revision and Assignment along with problem solving		
12 th	34 rd	Introduction to Structured Query Language	12 th week	Exercises on UPDATE statement
	35 th	Data definition language : Create, Alter, Drop commands		
	36 th	Data Manipulation Language (DML) like select, delete, update and insert command.		
13 th	37 th	Select command with where clause	13 th week	Exercises on UPDATE statement- continues
	38 th	Select command with where clause using conditional expressions and Boolean operators		
	39 th	Select command with group by clause		
14 th	40 th	Select command with like operator	14 th week	Revision of all the commands already done in the practical/labs.
	41 th	Insert, Update and Delete commands		
	42 th			
15 th	43 th	Revision and Assignment on all the SQL commands	15 th week	Test of different commands and with problem solving session.
	44 th	Test of Chapter 5 th		
	45 th	Revision of all the syllabus with problem solving		