

GOVT. POLYTECHNIC MANDI ADAMPUR

Lesson Plan (DBMS)

Name of the Faculty:
Discipline:
Semester:
Subject :
Lesson Plan Duration:
Work Load (Lecture/Practical) per week (In hour):

Kapil Bhoria
Computer Engg.

4th DBMS

(From Jan, 2018 to April, 2018)

Lecture-03, Practical-03

Week	Theory		Practical	
	Lecture Day	Topic(including assignment/Test)	Practical Day	Topic
1 st	1 st	Database system: Introduction to database system and its purpose. Why Database?	1 st (G1)	Overview, features and functionality, Application development in MS Access
	2 nd	Introduction of Database system, History of Database system	2 nd (G2)	Overview, features and functionality, Application development in MS Access
	3 rd	Characteristics of database approach, advantages and disadvantages of database system		
2 nd	4 th	3 rd	3 rd (G1)	Revision of overview, features and functionality, Application development in MS Access and checking of files
	5 th	Actors on the scene: Database administrators, database designers, End users, system analysts and application programmers	4 th (G2)	Revision of overview, features and functionality, Application development in MS Access and checking of files
	6 th	Workers behind the scene (DBMS system designers and implementers, tool developers, operator and maintenance personnel		
3 rd	7 th	Revision of Unit -1 covered	5 th h (G1)	Exercise on creation of tables
	8 th	Pre sessional test of Unit-1 covered	6 th h (G2)	Exercise on creation of tables

	9 th	Data models: (Physical model, object based model, Record based model, network model, Hierarchical model) schemas, subschemas, instances, database state		
4 th	10 th	Case study of models and schemas (examples student information system)	7 th (G1)	Revision of exercise on creation of tables and checking of files
	11 th	Three levels of Architectures: The external level, conceptual level, internal level	8 th (G2)	Revision of exercise on creation of tables and checking of files
	12 th	Mappings between three levels of architecture		
5 th	13 th	Revision of the topics covered of unit -2	9 th (G1)	Exercise on insertion of data into tables

	14 th	Pre sessional test	10 th (G2)	Exercise on insertion of data into tables
	15 th	Concept of centralized and client/server architecture for DBMS: single tier, two tier, three tier		
6 th	16 th	Logical data independence and physical data independence	11 th (G1)	Revision of exercise on insertion of data into tables and checking of files
	17 th	DBMS Languages and DBMS interfaces	12 th (G2)	
	18 th	Classification of database management system: Centralized, Distributed, Parallel and object based		
7 th	19 th	Revision of Unit-2	13 th (G1)	Exercise on different forms of select statement
	20 th	Pre sessional test of Unit-2	14 th (G2)	
	21 st	Data models classification: File based or primitive models, traditional data models, semantic data models		
8 th	22 nd	Entities and Attributes	15 th (G1)	Revision of different forms of select statement and checking of files
	23 rd	Entity types and entity sets	16 th (G2)	
	24 th	Key attribute and domain of attributes		
9 th	25 th	Revision of topics covered of Unit-3	17 th (G1)	Exercise on altering and dropping of tables
	26 th	Pre sessional test	18 th (G2)	
	27 th	Relationship among entities		
10 th	28 th	Database design with ER model	19 th (G1)	Revision of altering and dropping of tables and checking of files

	29 th	ER design issues	20 th (G2)	Revision of altering and dropping of tables and checking of files
	30 th	Mapping constraints		
11th	31 st	Revision of topics covered	21 st (G1)	Exercise on deletion of data using different conditions
	32 nd	Pre sessional test	22 nd G2)	Exercise on deletion of data using different conditions

	33 rd	Relational model concepts		
12 th	34 th	Domain, attributes, tuples, cardinality	23 rd (G1)	Revision of deletion of data using different conditions and checking of files
	35 th	Keys (Primary, secondary, foreign, alternative keys)	24 th (G2)	Revision of deletion of data using different conditions and checking of files
	36 th	Relations		
13 th	37 th	Revision of Unit -4	25 th (G1)	Exercise on update statement
	38 th	Pre sessional test	26 th (G2)	Exercise on update statement
	39 th	Data definition language		
14 th	40 th	Create, alter, drop commands	27 th (G1)	Revision of update statement and checking of files
	41 st	Data manipulation language	28 th (G2)	Revision of update statement and checking of files
	42 nd	Select Command with where clause using conditional expressions		
15 th	43 rd	Select statement with where clause using Boolean operators	29 th (G1)	Viva of practical no. 1 to 3
	44 th	Select command with group by clause and like operator	30 th (G2)	Viva of practical no. 1 to 3
	45 th	Insert Command		
16 th	46 th	Update and delete commands	31 st (G1)	Viva of practical no 4 to 6
	47 th	Revision of Unit 5	32 nd (G2)	Viva of practical no 4 to 6
	48 th	Test of Unit 5		