KIIT POLYTECHNIC, BHUBANESWAR

LESSON PLAN
Session (2023-2024)

Discipline: Computer Science and engineering	**Semester: 4th,Summer/2024**	**Name of the Faculty:** Swagatika Dalai Lecturer **Email ID:** sdalaifcs@kp.kiit.ac.in
Subject: Database Management System, Theory-4	**No. of Days/week:** 04	**Start Date:** 16/01/2024 **End Date:** 26/04/2024

Week	Class Day	Theory Topics
1st	1st	Purpose of database Systems
	2nd	Explain Data abstraction
	3rd	Database users
	4th	Data definition language
2nd	1st	Data Dictionary
	2nd	Revision
	3rd	Data independence
	4th	Entity relationship models
3rd	1st	Entity sets and Relationship sets
	2nd	Explain Attributes
	3dr	Mapping constraints
	4th	E-R Diagram
4th	1st	Relational model, Hierarchical model,
	2nd	Network model
	3dr	Quiz Test
	4th	Relational algebra
5th	1st	Different set operators with examples
	2nd	Select and project operators with example

	3rd	join operation with example
	4th	Question answer discussion
6th	1st	Functional Dependencies
	2nd	Functional Dependencies contd…
	3rd	Lossless join
	4th	Rules(Armstrong's axioms)
7th	1st	Importance of normalization
	2nd	First and Second normal form
	3rd	Third normal form
	4th	Explain BCNF
8th	1st	Revision
	2nd	Elementary idea of Query language
	3rd	Queries in SQL
	4th	Queries in SQL contd..
9th	1st	Queries in SQL contd..
	2nd	Queries in SQL contd..
	3rd	Simple queries to create, update, insert in SQL
	4th	Revision
10th	1st	Basic Idea about transaction processing
	2nd	Transaction & system concept
	3rd	Transaction & system concept contd...
	4th	Desirable properties of transaction
11th	1st	Schedules and Types of Schedules
	2nd	Recoverability
	3rd	Revision
	4th	Question answer discussion
12th	1st	Basic concepts of Concurrency Control
	2nd	Locks and its types
	3rd	Dead Lock
	4th	Dead Lock contd…
13th	1st	Live Lock
	2nd	Serializability (only fundamentals)
	3rd	Revision
	4th	Quiz Test

14th	1st	Authorization
	2nd	views
	3rd	Security constraints
	4th	Integrity Constraints
15th	1st	Integrity Constraints contd..
	2nd	Discuss Encryption
	3rd	Discussion of previous year questions
	4th	Discussion of previous year questions