DEPARTMENT OF COMPUTER SCIENCE

LESSON PLAN

Name: Dr. Komal **Subject : Operating System-II**
Branch/Semester– BCA/6th **SubCode: BCA-362**

Week	Date	Topics To Be Covered
1	01.01.2024 to 14.01.2024	**UNIT-1:** Process Synchronization: The Critical Section Problem – Single Process/Two Process Solutions; Semaphores – Types, Implementation, Deadlocks and Starvation; Classical Problems of Synchronization – The Bounded Buffer Problem, The Readers and Writers Problem, The Dining- Philosophers Problem
2	15.1.2024 to 28.1.2024	Critical Regions, Monitors, Directory Structure: Single Level, Two Level, Tree Structures, Acyclic Graph, General Graph; Directory Implementation, Recovery
3	29.1.2024 to 11.2.2024	**UNIT-2:** Secondary Storage Structure: Disk Structure, Disk Scheduling: FCFS, SSTF, SCAN, C-SCAN, LOOK; Selection of Disk Scheduling Algorithm; **Assignment-1**
4	12.2.2024 to 25.2.2024	Disk Management; Swap Space Management Network Operating Systems: Remote Login, Remote File Transfer; Distributed Operating System: Data Migration, Computation Migration, Process Migration
5	26.2.2024 to 10.3.2024	**UNIT-3:** Linux: Introduction, Features, Architecture, Distributions, Accessing Linux System, Login/Logout/Shutting Down, Comparison of Linux with other Operating Systems Commands in Linux: General-Purpose Commands, File Oriented Commands,
6	11.3.2024 to 23.3.2024	Directory Oriented Commands, Communication Oriented Commands, Process Oriented Commands, Redirection of Input and Output, Pipes, **UNIT-4:** Linux File System: Types of Files in Linux, File Attributes, Structure of File System, inode, File Permission, File System Components, Standard File System, File System Types, Disk Related Commands Asignment-2
8	24.3.2024 to 31.3.2024	
9	1.4.2024 to 14.4.2024	Processes in Linux: Introduction, Job Control in Linux using at, batch, corn & time commands The vi editor: Introduction, Modes of vi Editor, Command in vi Editor Shell Programming: Introduction, Shell Variables, Shell Keywords, Operators, Assigning Values to the Variables, I/O in Shell, Control Structures, Creating & Executing Shell Programs in Linux. **Class Test**
10	15.4.2024 to 20.4.2024	Revision

REFERENCE/TEXT BOOKS:

1. Silberschatz A., Galvin P.B.,and Gagne G., "Operating System Concepts", John Wiley & Sons,
2. Godbole, A.S., "Operating Systems", Tata McGraw-Hill Publishing Company, New Delhi•Inc.,New York.

DEPARTMENT OF COMPUTER SCIENCE

LESSON PLAN

Name: Dr. Komal **Subject : RDBMS**
Branch/Semester– BCA/ 4th **SubCode: BCA – 244**

Week	Date	Topics To Be Covered
1	01.01.2024 to 14.01.2024	Relational Model Concepts, Codd's Rules for Relational Model, Relational Algebra:-Selection and Projection, Set Operation, Renaming,
2	15.1.2024 to 28.1.2024	Join and Division, Relational Calculus: Tuple Relational Calculus and Domain Relational Calculus. **Assignment-1**
3	29.1.2024 to 11.2.2024	Functional Dependencies and Normalization:-Purpose, Data Redundancy and Update Anomalies, Functional Dependencies:-Full Functional Dependencies and Transitive Functional Dependencies,
4	12.2.2024 to 25.2.2024	Characteristics of Functional Dependencies, Decomposition and Normal Forms (1NF, 2NF, 3NF & BCNF).
5	26.2.2024 to 10.3.2024	SQL: Data Definition and data types, SQL Operators, Specifying Constraints in SQL,
6	11.3.2024 to 23.3.2024	Basic DDL, DML and DCL commands in SQL, Simple Queries, Nested Queries, Tables, Views, Indexes, Aggregate Functions, Clauses **Assignment-2**
8	24.3.2024 to 31.3.2024	Holi Break
9	1.4.2024 to 14.4.2024	PL/SQL architecture, PL/SQL and SQL*Plus, PL/SQL Basics, Advantages of PL/SQL, The Generic PL/SQL Block: PL/SQL Execution Environment, PL/SQL Character set and Data Types, Control Structure in PL/SQL, **Class Test**
10	15.4.2024 to 20.4.2024	Cursors in PL/SQL, Triggers in PL/SQL, Programming using PL/SQL.

REFERENCE/ TEXT BOOKS:

1. Elmasri & Navathe, "Fundamentals of Database Systems", 5th edition, Pearson Education..
2. C. J. Date, "An Introduction to Database Systems", 8th edition, Addison Wesley N. Delhi.