SCHEME OF COURSE WORK

DEPARTMENT OF INFORMATION TECHNOLOGY

Course Details:

Course Title	Data Base Management Systems Lab(DBMS)		
Course Code	**15CT1112**	**L T P C**	**0 0 3 2**
Program:	**B. Tech.**		
Specialization:	**Common to IT & CSE**		
Semester	**IV**		
Prerequisites	**NIL**		
Courses to which it is a prerequisite	**DW & DM, DDB.**		

Course Outcomes (COs):

A graduate of engineering will be able to

CO1	Create relational database.
CO2	Manipulate data in database using SQl.
CO3	Use aggregate functions
CO4	Create PL/SQL programs
CO5	Develop programs using triggers and cursors

Course Outcome versus **Program Outcomes:**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO-1	S	S		M	S					M		
CO-2	M			M								
CO-3	M			S								
CO-4	M			S								
CO-5				M								

S - Strongly correlated, *M* - *Moderately* correlated, *Blank* - *No correlation*

Assessment Methods:	Lab internal Test/Viva / Daily performance / End Exam

Teaching-Learning and Evaluation

Week	TOPIC / CONTENTS	Course Outcomes	Sample questions	*TEACHINGLEARNING STRATEGY	Assessment Method & Schedule
1	Introduction to Oracle, Creation of table, data types, Displaying table definition Using DESCRIBE, inserting rows into table and SELECT command.	CO 1, CO 2	1.what is DBMS? 2.what is relational database 3.syntax for inserting a row in SQL	Lecture, PPT, Task-based interaction	Daily performance and viva
2	Projection, ORDER BY clause, Altering and dropping of tables(use constraints while creating tables) examples using SELECT command	CO 2, CO 3	1. What is the use of ORDER BY? 2. How to update a table?	Lecture, PPT, Task-based interaction	Daily performance and viva
3	Queries using ANY, ALL, IN, EXISTS, NOTEXISTS, UNION, INTERSET, Constraints.	CO 3, CO 4	1. Difference between ALL and UNION? 2. What is a constraint?	Lecture, PPT, Task-based interaction	Daily performance and viva
4	Queries using Aggregate functions (COUNT, SUM, AVG, MAX and MIN), GROUP BY, HAVING and Creation and dropping of Views.	CO 1	1. List some mathematical functions with its uses? 2. What is a view?	Lecture, PPT, Task-based interaction	Daily performance and viva
5	Queries using Conversion functions (to_char, to_number and to_date), string functions(Concatenation, lpad, rpad, ltrim, rtrim, lower, upper, initcap, length, substr and instr), date functions (Sysdate, next_day, add_months, last_day, months_between, least, greatest, trunc, round, to_char, to_date)	CO 1	1. List some string functions with its uses? 2. Which formatesysdate is displayed? 3. Difference between trunk and round	Lecture, PPT, Task-based interaction	Daily performance and viva
6	SUBQUERIES(Multiple Subqueries, nested subqueries)	CO 3	1. what is a nested query? 2. What is a	Lecture, PPT, Task-based interaction	Daily performance and viva

			multiple query?		
7	Creation of simple PL/SQL program which includes declaration section, executable section and exception – Handling section (Ex. Student marks can be selected from the table and printed for those who secured first class and an exception can be raised if no records were found). a. Insert data into student table and use COMMIT, ROLLBACK and SAVEPOINT in PL/SQL block.	CO 3	1. What is PL/SQL 2. What is difference between PL/SQL and SQL? 3. How to handle Exceptions?	Lecture, PPT, Task-based interaction	Daily performance and viva
8	**LAB CYCLE TEST – I**				
9	CONTROL STRUCTURES (IF statement, Loop… End Loop, Exit command, While Loop, For Loop, Goto statement).	CO 1	1. what does END do? 2. how can be infinite loop exited in between? 3. Is GOT O a good control structure? Why?	Lecture, PPT, Task-based interaction	Daily performance and viva
10	Nested loops using ERROR Handling, BUILT –IN Exceptions, USE defined Exceptions, RAISE- APPLICATION ERROR.	CO1, CO2	1. How are loops nested in SQL? 2. Difference between user defined and built-in exceptions 3. How to raise an error?	Lecture, PPT, Task-based interaction	Daily performance and viva
11	Programs development using creation of procedures, passing parameters IN and OUT of PROCEDURES.	CO 3, CO4, CO5	1. What is procedure? 2. How are in and out parameters	Lecture, PPT, Task-based interaction	Daily performance and viva

			passed to them?		
12	Program development using creation of stored functions, invoke functions in SQL Statements and write complex functions.	CO 3, CO4, CO5	1. How to invoke functions in SQL statements? 2. How to store a function?	Lecture, PPT, Task-based interaction	Daily performance and viva
13	Program development using creation of package specification, package bodies, private objects, package variables and cursors and calling stored packages.	CO 3, CO4, CO5	1. What are package? 2. What is a cursor? 3. How a package can be called?	Lecture, PPT, Task-based interaction	Daily performance and viva
14	Develop programs using features parameters in a CURSOR, FOR UPDATE CURSOR, WHERE CURRENT of clause and CURSOR variables.	CO 3, CO4, CO5	1. What are features parameter? 2. What WHERE CURRENT clause do?	Lecture, PPT, Task-based interaction	Daily performance and viva
15	Develop Programs using BEFORE and AFTER Triggers, Row and Statement Triggers and INSTEAD OF Triggers.	CO 3, CO4, CO5	1. What is a TRIGGER? 2. Difference between row and statement trigger?	Lecture, PPT, Task-based interaction	Daily performance and viva
16	**LAB CYCLE TEST - II**				
17/18	**END EXAM**				