

SCHEME OF COURSEWORK

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		
Course 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	PSO1	PSO2	PSO3
CO-1	3	3	3	3	3						3	3	2		
CO-2		2		2									2		
CO-3	2		2	2									2		
CO-4		3	2		2								2		
CO-5	2	3		2									2		

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	*TEACHING LEARNINGS STRATEGY	Assessment Method & Schedule
1	Introduction to Oracle, Creation of table, datatypes, Displaying table definition Using DESCRIBE, inserting rows into table	CO1, CO2	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	CO2, CO3	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, NOT EXISTS, UNION,	CO3, CO4	1. Difference between ALL and UNION? 2. What is a constraint?	Lecture, PPT, Task-based interaction	Daily performance and viva
4	INTERSET, Constraints. Queries using Aggregate functions (COUNT, SUM, AVG, MAX and MIN), GROUP BY, HAVING and	CO1	1. List some mathematical functions with its uses? 2. What is a view?	Lecture, PPT, Task-based interaction	Daily performance and viva

5	<p>Queries using Conversion functions(to_char ,to_numberandto_date),</p> <p>stringfunctions(Concatenation,lpad, rpad, ltrim, rtrim,lower, upper, initcap,length,substrandinstr),datefunction s (Sysdate, next_day,</p>	CO1	<ol style="list-style-type: none"> 1. Listsomestringfunctions with hitsuses? 2. Which formatesysdate is displayed? 3. Differencebet weentrunkan d round 	Lecture,PPT,Taskbasedinteraction	Dailyperformanceand viva
6	<p>add_months, SUBQUERIES(Multi plelast_day, Subqueries, nested subqueries)</p>	CO3	<ol style="list-style-type: none"> 1. whatis anestedquery ? 	Lecture,PPT,Taskbasedinteraction	Dailyperformance and viva

			multiple query?		
7	<p>Creation of simple PL/SQLprogramwhich includes declaration section, executablesectionand exception– Handling section (Ex.Student marks canbeselected from the tableand printed for thosewho securedfirst classandanexception canberaisedifnorecordswerfound).</p> <p>a. Insertdata intostudent tableanduse COMMIT,</p>	CO3	<ol style="list-style-type: none"> 1. PL/SQL Whatis 2. differencebetweenPL/SQL andSQL? How to handleExceptions? 3. 	Lecture,PPT,Taskbasedinteraction	Dailyperformanceand viva
8	LABCYCLE 'EST-I				

9	CONTROL STRUCTURES (IF statement, Loop... EndLoop, Exit command, While Loop, For Loop, Got o statement).	CO1	1. whatdoes END do? howcan 2. beinfinitelo opexitedinb etween? IsGOTOago 3. odcontrolstr icture?Why ?	Lecture,PPT,Taskbasedinteraction	Dailyperfor manceand viva
10	Nested loops using ERROR Handling, BUILT -IN Exceptions, USEdefinedEx ceptions, RAISE- APPLICATIONERROR.	CO1,CO2	1. How areloopsneste di nSQL? 2. Difference betweenuser definedandb uilt- inexceptions 3. How to	Lecture,PPT,Taskbasedinteraction	Dailyperfor manceand viva
11	Programsdevelopment usingcreationofprocedures, passing parametersINandOUT ofPROCEDURES.	CO3, CO4, CO5	1. Whatis procedure? 2. How areinand out	Lecture,PPT,Task- basedinteraction	Daily performance and viva

			passed tothem?		
12	Program development using creationofstoredf unctions, invoke functions in SQL Statements and	CO3, CO4, CO5	1. How to invoke functionsinSQLs tatement? 2. How to store a function?	Lecture,PPT,Task- basedinteraction	Daily performance and viva
13	Programdevelopment using creation ofpacka gespecification,packageb odies,privateobjects, package variablesand cursorsandcallingstoredpa	CO3, CO4, CO5	1. What are package? 2. What is a cursor? How a packagecan becalled? 3.	Lecture,PPT,Task- basedinteraction	Daily performance and viva

14	Develop programs using features parameters in a CURSOR, FOR UPDATE CURSOR, WHERE CURRENT of clause and CURSOR variables.	CO3, CO4, CO5	<ol style="list-style-type: none"> 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.	CO3, CO4, CO5	<ol style="list-style-type: none"> 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	EN EXAM				