



SWARNANDHRA

COLLEGE OF ENGINEERING & TECHNOLOGY

(AUTONOMOUS)

Accredited by National Board of Accreditation, AICTE, New Delhi, Accredited by
NAAC with "A" Grade – 3.32 CGPA, Recognized under 2(f) & 12(B) of UGC Act 1956,
Approved by AICTE, New Delhi, Permanent Affiliation to JNTUK, Kakinada
Seetharampuram, W.G.DT., Narsapur-534280, (Andhra Pradesh)

DEPARTMENT OF INFORMATION TECHNOLOGY

TEACHING PLAN

Course Code	Course Title	Semester	Branch	Contact Periods /Week	Academic Year	Date of commencement of Semester
23CS3L02	DATABASE MANAGEMENT SYSTEMS lab	IV	IT	3 Periods	2025-2026	10-12-25

COURSE OUTCOMES

1	DDL, DML, DCL commands
2	Queries, nested queries, built-in functions
3	PL/SQL programming- control structures
4	Procedures, Functions, Cursors, Triggers
5	Database connectivity- ODBC/JDBC

Experiment Number		Contact Hours
1	Creation, altering and dropping of tables and inserting rows into a table (use constraints while creating tables) examples using SELECT command.	3
2	Queries (along with sub Queries) using ANY, ALL, IN, EXISTS, NOT EXISTS, UNION, INTERSET, Constraints. Example:- Select the roll number and name of the student who secured fourth rank in the class.	3
3 & 4	Queries using Aggregate functions (COUNT, SUM, AVG, MAX and MIN), GROUP BY, HAVING and Creation and dropping of Views. 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)	3
5	i. Create a 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) ii. Insert data into student table and use COMMIT, ROLLBACK and SAVEPOINT in PL/SQL block.	3



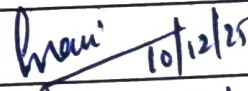
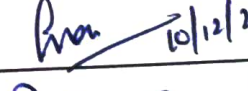
SWARNANDHRA

COLLEGE OF ENGINEERING & TECHNOLOGY

(AUTONOMOUS)

Accredited by National Board of Accreditation, AICTE, New Delhi, Accredited by NAAC with "A" Grade – 3.32 CGPA, Recognized under 2(f) & 12(B) of UGC Act 1956, Approved by AICTE, New Delhi, Permanent Affiliation to JNTUK, Kakinada Seetharampuram, W.G.DT., Narsapur-534280, (Andhra Pradesh)

6	Develop a program that includes the features NESTED IF, CASE and CASE expression. The program can be extended using the NULLIF and COALESCE functions.	3
7	Program development using WHILE LOOPS, numeric FOR LOOPS, nested loops using ERROR Handling, BUILT -IN Exceptions, USE defined Exceptions, RAISE- APPLICATION ERROR.	3
8 & 9	Programs development using creation of procedures, passing parameters IN and OUT of PROCEDURES.	3
	Program development using creation of stored functions, invoke functions in SQL Statements and write complex functions..	
10	Develop programs using features parameters in a CURSOR, FOR UPDATE CURSOR, WHERE CURRENT of clause and CURSOR variables.	3
11	Develop Programs using BEFORE and AFTER Triggers, Row and Statement Triggers and INSTEAD OF Triggers	3
12 & 13	Create a table and perform the search operation on table using indexing and non- indexing techniques.	3
	Write a Java program that connects to a database using JDBC	
14 & 15	Write a Java program to connect to a database using JDBC and insert values into it	3
	Write a Java program to connect to a database using JDBC and delete values from it	
CUMMULATIVE PROPOSED PERIODS		33

	Name	Signature with Date
i. Faculty	Mrs. V. Sivani	 10/12/25
ii. Module Coordinator	Mrs. V. Sivani	 10/12/25
iii. Programme Coordinator	Dr.RVVS Prasad	 10/12/25


Principal