G.H. Patel of College of Engineering and Technology

Department of Computer Engineering

Vision

To produce globally competitive computer engineers, who are prepared to accept the challenges at professional level, while maintaining the core values.

Mission

- ✓ To create excellent teaching learning environment.
- ✓ To mould engineers with a strong foundation of scientific knowledge and engineering concepts.
- ✓ To enhance the acquired concepts and develop new technology through excellence in research.
- ✓ To assist nation building and elevating the quality of life of the people through leadership in professionalism, education, research and public services.

Programme Educational Objectives (PEO)

- ✓ To educate young aspirants with the fundamentals of engineering and knowledge of latest technologies.
- ✓ To encourage the students to remain updated by pursuing higher degree or certification programs.
- ✓ To assume management and leadership roles to contribute in socio-economic development of the nation.

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Academic Year 2025-26, Branches: (CP-4, CSD-13), Semester 7

Subject Code: 202046704 **Subject Name:** Compiler Design

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Sr. No.	Name of the Experiment	Page No.	Date	Marks	Signature
01	a) Write a C program to remove all the comments from the program.				
	b) Write a C program to recognize identifiers and numbers.				
02	Write a C program to generate tokens for a C program.				
03	a) To Study about Lexical Analyzer Generator (LEX).				
	b) Create a Lex program to take input from text file and count no of characters, no. of lines & no. of words.				
04	a) WAP to implement yytext method in a LEX program.				
	b) WAP to implement ECHO, REJECT functions provided in Lex.				
	c) WAP to implement BEGIN directive in a LEX program.				
05	a) Write a Lex program to count number of vowels and consonants in a given input string.				
	b) Write a Lex program to print out all numbers from the given file.				
	c) Write a Lex program to count the number of comment lines in a given C program.				
06	a) WAP to implement unput and input.				
	b) WAP to implement yyterminate, yy_flush_bufferin LEX program.				
	c) WAP to implement yywrap in LEX program.				
	d) WAP to implement yymore and yyless in LEX program.				
07	WAP to Find the “First” set Input: The string consists of grammar symbols. Output: The First set for a given string. Explanation: The student has to assume a typical grammar. The program when run will ask for the string to be entered. The program will find the First set of the given string.				
08	WAP to Find the “Follow” set. Input: The string consists of grammar symbols. Output: The Follow set for a given string. Explanation: The student has to assume a typical grammar. The program when run will ask for the string to be entered. The program will find the Follow set of the given string.				
09	Construct a recursive descent parser for a given grammar.				
10	Write a C program for constructing of LL (1) parsing.				
11	Implement a C program to implement operator precedence parsing.				
12	Given a parsing table, Parse the given input using Shift Reduce Parser for any unambiguous grammar.				
13	Introduction to YACC and generate calculator program.				
14	Generate 3-tuple intermediate code for given infix expression.				
15	Extract predecessor and successor from given control flow graph.				