CHARUSAT
CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY
Accredited Grade A by NAAC

DEPSTAR

Charotar University of Science and Technology

Devang Patel Institute of Advance Technology and Research

Department of Computer Science & Engineering

Subject: Design of Language Processor **Semester:**7

Subject Code: CE442 **Academic Year:**2021-22

Course Outcome (COs):
At the end of the course, the students will be able to

CO1	Understand design and processing of different language processor, loaders and linkers
CO2	Design top-down and bottom-up parsers
CO3	Identify different memory management schemes of language processors
CO4	Develop semantic analysis scheme to generate intermediate code
CO5	Apply different code optimization techniques
CO6	Develop algorithms to generate code for a target machine

Practical List

Expt. No	Experiment Title	Hrs.	COs
1	Implement a lexical analyzer for a subset of C using LEX Implementation should support Error handling.	02	1
2	Implement a lexical analyzer for identification of numbers.	02	1
3	Write an ambiguous CFG to recognize an infix expression and implement a parser that recognizes the infix expression using YACC	02	3
4	Implement a Calculator using LEX and YACC.	02	3,4
5	Implementation of Syntax Tree	02	2,4
6	Implementation of Context Free Grammar.	02	3,4

7	Design of a Predictive parser	02	3,4
8	Implementation of code generator.	02	6
9	Implementation of code optimization for Common sub-expression elimination, Loop invariant code movement.	02	6
10	Implement Deterministic Finite Automata.	02	2,3