

**Charotar University of Science and Technology [CHARUSAT]****Chandubhai S. Patel Institute of Technology [CSPIT]****Department of Computer Science & Engineering****Assignment-3****Last date for submission: 13/10/2023**

Subject code	:	CS450	Semester	:	7	Academic Year	:	2023-24
Subject name	:	Compiler Design						

Sr. No.	Aim	CO
1.	Differentiate between top down parser and bottom up parser.	3
2.	Explain handle and handle pruning	4
3.	Consider the following grammar S → AA A → aA A → b And construct the LALR parsing table.	3
4.	Differentiate between S attributes and L attributes	4
5.	Differentiate between parse tree and syntax tree	3
6.	What is DAG? What are its advantages in context of optimization? How does it help in eliminating common sub expression?	5
7.	What is peephole optimization? Explain with example	5
8.	What is global optimization? Name the 2 types of analysis performed for global optimization	4
9.	Discuss the functions of error handler.	4
10.	Show the following grammar is LR(1) but not LALR(1). S → Aa   bAc   Bc   bBa A → d B → d	3
11.	Construct SLR parsing table for the following grammar : S → (L)   a L → L,S   S	3
12.	Construct syntax tree and DAG for following expression: X = a * (b+c) - (b+c)* d	4
13.	Explain various parameter passing methods.	5
14.	Explain various issues in design of code generator.	5
15.	Explain Basic Block and Flow Graph with example.	5

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