

Charotar University of Science and Technology
Devang Patel Institute of Advance Technology and Research
Department of Computer Science & Engineering
Subject: CS450 - Design of Language Processors
Unit Test – 1

Semester: 7th (B. Tech.)
Date: 17/08/2023, Thursday

Maximum Marks: 30
Time: 10:10 am to 11:10 am

Instructions:

- (i) Attempt *all* the questions.
- (ii) Figures to the right indicate *full* marks.
- (iii) Make suitable assumptions and draw neat figures wherever required.

1. Define Token, Pattern, lexems with examples? [3]
2. Differentiate lexical and syntax error with appropriate example. [2]
3. Write a brief note on Input Buffering techniques. [5]
4. Explain How a C program is executed in Compiler Design. [5]
5. consider following grammar: [5]
 $E \rightarrow E + E / E \times E / a$
verify, whether the input string : $a+a*a$ can be derived or not using RDP.
6. Remove left recursion from the following grammars: [5]
 1. $E \rightarrow E + E / E \times E / a$
 2. $S \rightarrow (L) / a$
 $L \rightarrow L , S / S$
7. Discuss synthesized attributes and inherited attributes in details. [5]

ALL THE BEST