

**SIR SYED UNIVERSITY OF ENGINEERING & TECHNOLOGY**  
**COMPUTER SCIENCE AND INFORMATION TECHNOLOGY DEPARTMENT**  
**SPRING 2021**  
**COMPILER CONSTRUCTION (CS-310)**  
**Quiz 2**

Semester: V  
Max Time: 30 mins  
Date: 29-April-2021.  
Instructions:

Batch: 2019  
Max Marks: 10

- Attempt all questions

Question 1 [10 Marks]  
Consider the following Context Free Grammar

$S \rightarrow ( L ) \mid a$   
 $L \rightarrow L , S \mid S$

- a> List down all the terminals and Non-Terminals. [1 Mark]  
b> Find the parse tree for the following [5 Marks]  
    i)     (a,a)  
    ii)    (a,(a,a))  
    iii)   (a,((a,a),(a,a)))  
c> Construct the leftmost derivation for the above. [4 Marks]