Compiler Design

Midsemester Assignment

Summer 2020-2021

1. Write down the output for the following input expression: **p = x-y * (y+z) / (z-x) + 15** in equivalent assembly code, where all variables are float. Show the steps you used to produce the assembly code. 7

2. Construct a syntax directed translation scheme that translates arithmetic expressions from infix notation into postfix notation. Show the application of your scheme to the string 4 / 2 + 5 * 2.. 7

3. Add 'Semantic Rules' and 'Translation Schemes' to the following productions of a grammar. 6

Productions	Semantic Rules	Translation Schemes
S → U		
U → T a U		
U → T a T		
T → a T b T		
T → b T a T		
T → d		

Instructions

1. Submission Date**: July 03,2021**. (you must submit the assignment before 11.59 PM).
2. Document Type: Hand Written -> Scanned-> PDF format
3. Write down answer sequentially as numbered.
4. **DO NOT COPY**, **if found then you (also who helped you to copy the assignment) all of you will get zero.**