

CS 606 Compiler Constructions

Assignment # 01

Spring 2011

Total Marks = 20

Deadline

Your assignment must be uploaded / submitted before or on **April 18, 2011**

Upload Instructions

Please view the assignment submission process document provided to you by the Virtual University.

Rules for Marking

Please note that your assignment will not be graded if:

- It is submitted after due date
- The file you uploaded does not open
- The file you uploaded is copied from someone else or from internet
- It is in some format other than **.doc**

Note: Material that is an exact copy from handouts or internet would be graded zero marks. Your solution should consist of the material found through different sources and written in your own words.

Assignment Statements:

Question 1:

Draw the FA for a language which consists of the tokens:

<, <=, =, >=, >, <>, (,), +, -, *, /, :=, ;, identifier, keywords, constants and literals (which are enclosed in apostrophes). Comments, which begin with /* and end with a */, and blanks are ignored by the scanner (that is blanks are treated as blank separator only).

Question 2:

Design a context-free grammar which generates the mathematical expressions for '+' and '-' operators. Also apply this grammar on algebraic expression "a - b + c" and construct the parse tree for this string