**CSE420: Compiler Design**

**Assignment 02**

**Dead Line: 24/10/2017**

1. Consider the following grammar, ***G = {bexpr, {bexpr,bterm, bfactor}, {not, or, and, (, ), true, false}, P}***.

*bexpr → bexpr or bterm | bterm*

*bterm → bterm and bfactor | bfactor*

*bfactor → not bfactor | ( bexpr ) | true | false*

* Derive the Canonical LR(0) Collections. [6]
* Determine the LR(0) Automation/ DFA. [2]
* Construct the LR(0) parse Table. [6]
* Parse the string “*not(false or (true and false))” using the table constructed.* [4]
* Construct the SLR parse Table.[2]
* Parse the string “(*not(false or (true and false)))” using the table constructed.* [4]

1. Consider the following grammar:

*S –> V = E*

*E –> F | E + F*

*F –> V | int | (E)*

*V –> id*

* Derive the Canonical LR(0) Collections. [5]
* Determine the LR(0) Automation/ DFA. [1]