VIII University

CS606 Compiler Constructions

Assignment #3

Instructions:

Your assignment must be uploaded/submitted before or on 8th June 2011.

- Your assignment must be in .doc format.(Any other formats like scan images, PDF, Zip, rar, bmp, docx etc will not be accepted)
- Save your assignment with your ID (e.g. bc020400600.doc).
- No assignment will be accepted through email.

It should be clear that your assignment will not get any credit if:

- The assignment is submitted after due date.
- The submitted assignment does not open or file is corrupted.
- Your assignment is copied from internet, handouts or from any other student (Strict disciplinary action will be taken in this case).

Question 1: [10]

Write an algorithm for constructing the canonical LR parsing table where the input and output of this algorithm will be as follows:

Input: An augmented grammar G'

Output: The canonical LR parsing table functions action and goto for G'

Question 2: [10]

Apply your algorithm and construct the canonical parsing table for the following grammar without showing the intermediate steps e.g. goto graph.

 $S \rightarrow aABe$

 $A \rightarrow Abc \mid b$

 $B \rightarrow d$

Note:

- Your answer must follow the below given specifications. Marks will be deducted if you do not follow these instructions.
 - Font style: "Times New Roman"
 - Font color: "Black"
 - Font size: "12"
 - **Bold** for heading only.
 - Font in *Italic* is not allowed at all.

- You should consult recommended books to clarify your concepts.
- It's better for you to submit the assignment well before the deadline.
- Do not put any query at MDB about this assignment, if you have any query then email at CS606@vu.edu.pk