

Computer Science Language Processors

Rules

- The duration of the test is **90 minutes**
- Questions will not be answered during the test
- One cannot re-enter the classroom after leaving it
- The answers must be written using a pen (not a pencil)

1.- Given the grammar:

$$\begin{aligned} S &::= aSD \mid b \\ D &::= Dc \mid e \end{aligned}$$

- Construct the parsing table for the SLR(1) parser and represent the DFA that is obtained using this methodology.**
- Construct the parsing table for the LR(1) parser.**
- Construct the parsing table for the LALR(1) parser.**
- Extract conclusions about which methods can be used or not and show how the input string *aabece* would be analyzed using the correct ones.**
- Complete the parsing table for the SLR(1) parser to provide the user with detailed information about the different errors that can be detected during the parsing process.**