

Quiz-01, CSE331

Marks 15 (2+7+3+3)

Time: 1hr

Consider the following CFG:

$E \rightarrow DD$

$D \rightarrow FJ \mid cF \mid aD \mid cD$

$F \rightarrow ab \mid ad \mid J$

$J \rightarrow ra \mid ar \mid \epsilon$

- Write the formal definition of the above CFG.
- Show the LMD and RMD for deriving the string "**abracadra**".
- Draw the parse for the above derivation
- Is the grammar ambiguous for the given string?