START OF QUIZ
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Question 1

Topic: Lecture 1
Source: Lecture 1

Write the parenthetic parse of the following sentence: "I will not eat green eggs and ham." (1)

Question 2

Topic: Lecture 3
Source: Lecture 3

What does it mean to delexicalize a sentence? Why might that help or harm an automatic parser? (1)

Question 3

Topic: Lecture 1
Source: Lecture 1

Why does the substitution test work for identifying constituents? Do you think there are any constraints on what can be substituted? Explain briefly. (1)

Question 4

Why do we not use accuracy to evaluate chunkers? Can you think of any other tasks where this might be as big (or bigger) of a problem? (1)

Question 5

What is meant by "context-free" in a context-free grammar? Why is this sufficient to represent most language, which we know is very contextually dependent? (1)

Question 6

Do you think that we could do dependency parsing and a constituency-based task (such as chunking) at the same time? What features of the tasks might support each other (additive qualities), and which might make such a task more difficult (adversarial qualities)? (2)

Question 7

Basque is an "ergative-absolutive" language - instead of defining NPs with respect to labels such as "subject" and "direct object", NPs are defined with respect to "subject of a transitive verb" (ergative) or "subject of an intransitive verb OR object of a transitive verb" (absolutive). Explain what features would need to be defined in such a grammar, and how they would interact (you can assume a similar SVO order as English). (2)

Question 8

Given two parse trees, calculate the PARSEVAL score. Also briefly describe whether any errors are "syntacto-semantic" errors (ie, an error that requires real-world knowledge to arrive at the correct parse). 1: (S (NP (DT The) (JJ quick) (JJ brown) (NN fox)) (VP (VBZ jumps) (PP (IN over) (NP (DT the) (JJ lazy) (NN dog))))) (2): (S (NP (NP (DT The) (NP (JJ quick) (NP (JJ brown) (NN fox))))) (VP (VBZ jumps) (PP (IN over) (NP (DT the) (JJ lazy) (NN dog)))))

Question 9

Topic: Long
Source: Lecture 3

In class, we briefly mentioned OSASCOMP (the order of adjectives in English - Opinion, Size, Age, Shape, Colour, Origin, Material, Purpose). For example, we can have the "big red Italian car", but not the "red Italian big car". Please compose a CFG that can handle this ordering (you can assume that our grammar already knows what adjectives and noun phrases are). (3)

END OF QUIZ