START OF QUIZ
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Question 1

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 2

Topic: Lecture 1
Source: Lecture 1

Imagine we were trying to create a treebank for an unknown language. We start by creating a list of words with their parts of speech. Do you think it would make sense to collect open or closed classes first? Explain. (1)

Question 3

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 4

Topic: Lecture 2
Source: Lecture 2

Briefly describe chunking, why it's easier than parsing, and why it is an important task in NLP. (1)

Question 5

Topic: Lecture 4
Source: Lecture 4

Name 2 advantages of feature grammars over CFGs, and briefly explain why they are useful. (1)

Question 6

Topic: Lecture 2
Source: Lecture 2

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

Topic: Lecture 3
Source: Lecture 3

Imagine, if you will, a "mildly-context-sensitive" grammar, that only allows for one non-terminal to appear as a contextual marker (let's call it "CON"). Anything not involving CON has to satisfy CFG rules. Do you think that this would be restrictive enough to satisfy the small number of cases that don't satisfy context-freedom, without just being a CSG in disguise? (2)

Question 8

Topic: Lecture 4
Source: Lecture 4

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 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