

**START OF QUIZ**

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## Question 1

Topic: Lecture 3

Source: Lecture 3

In class, we discussed how CFGs do not explicitly allow for optionality in the grammar. How can we adapt our grammars to allow for optional elements? (1)

## Question 2

Topic: Lecture 4

Source: Lecture 4

Imagine that you are a comedian writing jokes. How might you use an automatic parser to help you find material? Briefly explain. (1)

### Question 3

Topic: Lecture 4

Source: Lecture 4

Briefly describe how underspecification works in a feature grammar. (1)

## Question 4

Topic: Lecture 1

Source: Lecture 1

Write the parenthetical parse of the following sentence: "Yertle the Turtle is king of the pond."

(1)

## Question 5

Topic: Lecture 2

Source: Lecture 2

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 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-freeness, without just being a CSG in disguise? (2)



## Question 8

Topic: Lecture 1

Source: Lecture 1

Imagine someone develops a new parser that has 100

## 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**