

**START OF QUIZ**

**Student ID:**

**11337250,Oloomi,Sina**

Academic honesty is essential to the continued functioning of the University of British Columbia as an institution of higher learning and research. All UBC students are expected to behave as honest and responsible members of an academic community. Failure to follow the appropriate policies, principles, rules, and guidelines of the University with respect to academic honesty may result in disciplinary action.

I agree that all answers provided are in my own words, and that I will not discuss the contents of this quiz with any of my fellow students until after the exam period has completed for everyone. Furthermore, any response that used generative AI tools has been rephrased into my own interpretation, and has been appropriately cited.

Signature: \_\_\_\_\_

## Question 1

Topic: Lecture 2

Source: Lecture 2

If you had a cascaded pipeline of constituency and dependency parsers, which would you run first? What are the risks of getting it backwards? (1)

## Question 2

Topic: Lecture 3

Source: Lecture 3

Why is recursion essential in CFGs for modeling natural language? Give a simple example involving a noun phrase or verb phrase. (1)

### Question 3

Topic: Lecture 1

Source: Lecture 5

Write the parenthetic parse of the following sentence: “I never got to bat in the major leagues.” (1)

## Question 4

Topic: Lecture 4

Source: Lecture 4

Why do we not evaluate parsers by the number of correct nodes in the tree? (1)

## Question 5

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 6

Topic: Lecture 2

Source: Lecture 2

Imagine that you're working with a copy-editor to tighten the prose of prospective novels. How might you use parsers to identify places where you can "trim the fat" without being too aggressive? (2)

## Question 7

Topic: Lecture 1

Source: Lecture 5

Imagine that two linguists are creating a treebank, but even though they have a clear annotation schema, they disagree on annotations about 10 percent of the time. How could you mitigate the effects of this disagreement on your downstream parser? (2)

## Question 8

Topic: Lecture 3

Source: Lecture 3

Clitics are a special type of syntactic headache. Unlike affixes, which attach at the word level, clitics can attach at the phrase level. For example: “The man who saw the bird’s camera was not quick enough.” or “Those of us who lived through the ’90s’ve experienced a world without the internet.” Explain why phrase-level clitic attachment is problematic for a CFG, and discuss how (if at all) a CFG could be adapted to model this behavior. (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