START OF QUIZ
Student ID:
69408532,Xiong,Leah

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 3
Source: Lecture 3

Why can a CFG production only have a single non-terminal on the LHS? Answer both why it must be singular, and why it must be a non-terminal. (1)

Question 2

Topic: Lecture 3
Source: Lecture 3

Explain how phrasal attachment errors produce ambiguity. Provide an example other than what we discussed in class. (1)

Question 3

Topic: Lecture 4
Source: Lecture 4

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

Question 4

Topic: Lecture 2
Source: Lecture 2

In class, every example we had was well-tokenized, but there are parsing cues within the shape of the word (its morphology). Briefly explain how a parser could leverage this, with an example. (1)

Question 5

Topic: Lecture 1
Source: Lecture 5

Up to this point, we've largely ignored function words, but they are extremely influential in parsing. Give 2 reasons why. (1)

Question 6

Topic: Lecture 1
Source: Lecture 5

You are building a parser for a language with much freer word order than English. What assumptions do you need to weaken before building the parser. Do you think it will have much of an impact on the quality of the parser? (2)

Question 7

Topic: Lecture 4
Source: Lecture 4

Given the following parse trees, calculate the PARSEVAL score. GOLD: (S (NP (DT The) (NNS tourists)) (VP (VBD photographed) (NP (DT the) (NN mountain) (PP (IN with) (NP (NN snow)))))) SYSTEM: (S (NP (DT The) (NNS tourists)) (VP (VBD photographed) (NP (DT the) (NN mountain)) (PP (IN with) (NP (NN snow))))) Also briefly describe whether any errors are "syntacto-semantic" errors (ie, an error that requires real-world knowledge to arrive at the correct parse). (2)

Question 8

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 9

Topic: Long
Source: Lecture 2

When learning a language (whether an L1 or L2), speakers often make grammatical mistakes, but are still understandable by other speakers. What do you think this says about the role of syntax in language, and how do you think it could help us create more robust language recognition systems? (3)

END OF QUIZ