START OF QUIZ
Student ID:
51944619,Jing,Yixiao

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

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

Question 2

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 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 1
Source: Lecture 5

Write the parenthetic parse of the following sentence: "You're going to need a bigger boat!"(1)

Question 5

Topic: Lecture 2
Source: Lecture 2

What properties of English syntax make regular expressions suitable for chunking? Do you think that this functionality would extend to many other languages? Briefly explain. (1)

Question 6

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 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 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 9

Topic: Long
Source: Lecture 4

Imagine you're building a tool to help second language learners of language X. You have a grammar of their first language (L1), a grammar of the language they are trying to learn (X), and a parallel corpus of L1-X sentences. How might you use this data to learn a new grammar that translates the syntax of L1 into the syntax of X, for the purpose of creating educational tools that will help the language learner associate features of X with their L1? (For example, a French-English grammar might have something like NP -> NN JJ : NP -> JJ NN). (3)

END OF QUIZ