

**START OF QUIZ**

**Student ID:**

**71936512,Jimenez,Daniel**

## Question 1

Topic: Lecture 1

Source: Lecture 1

What are the benefits of representing synonymy and hypernymy in a graph? Do you think there could be a better data structure or way of representing the information? Briefly explain. (2)

## Question 2

Topic: Lecture 3

Source: Lecture 3

Is implication transitive? That is, if  $A \rightarrow B$ , and  $B \rightarrow C$ , does  $A \rightarrow C$ ? Explain. (1)

### Question 3

Topic: Lecture 3

Source: Lecture 3

Given that A is True, B is False, and C is True, list 3 complex statements that are true, and 2 that are false.

(1)

## Question 4

Topic: Lecture 1

Source: Lecture 1

Define the LCS. Why is it important for calculating word similarity? (2)

## Question 5

Topic: Lecture 2

Source: Lecture 2

What is the purpose of a dictionary gloss? (1)

## Question 6

Topic: Lecture 4

Source: Lecture 4

How would you describe the following sentence in FOL (you don't need to write the FOL statement - just describe how it would be structured)? After climbing a great hill, one only finds that there are many more hills to climb.

## Question 7

Topic: Lecture 2

Source: Lecture 2

In class, I mentioned that we rarely do WSD explicitly, because we would need one model / word. In COLX 521, we saw that we could lemmatize words to reduce them to a common form. Why couldn't we do something similar (like reducing all synonyms to a common hypernym) for WSD? (2)



## Question 8

Topic: Lecture 4

Source: Lecture 4

Why is FOL more expressive than ontologies (Description logics)? ie, what can FOL do that ontologies can't? (1)

## Question 9

Topic: Long

Source: Lecture 3

Write an FOL representation for the following sentences: Blueberries are sweet, but strawberries are sweeter. The book is always better than the movie. Some spiders are dangerous. In winter, it always rains in Vancouver.

**END OF QUIZ**