

**START OF QUIZ**  
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## Question 1

Topic: Lecture 3

Source: Lecture 3

How might theta roles help in the task of anaphora resolution? (1)

## Question 2

Topic: Lecture 2

Source: Lecture 2

What are the steps necessary for normalizing temporal events? (1)

### Question 3

Topic: Lecture 1

Source: Lecture 1

Why are CRFs generally preferable to HMMs when it comes to NER? (1)

## Question 4

Topic: Lecture 1

Source: Lecture 1

Explain one way that NER tagging is similar to POS tagging, and two ways it's different. (1)

## Question 5

Topic: Lecture 4

Source: Lecture 4

If we were to attempt joint NER and SRL, how would we set up the model? Describe the input, the architecture, and the output. (2)

## Question 6

Topic: Lecture 3

Source: Lecture 3

How can semantic roles be used to identify relations in relation extraction? How can they help us identify false positives from our system? (2)

## Question 7

Topic: Lecture 4

Source: Lecture 4

We talked about a few other constraints for the ILP solver, such as making sure that "ARG0 must occur before ARG1". How would you implement this as an ILP constraint? (You don't need to write the pulp code - just explain how you would force the constraint.) (2)



## Question 8

Topic: Lecture 2

Source: Lecture 2

In the sentence: “I have not gone by the name of ‘Obi-wan Kenobi’ since before you were born.”, how do we know that he has not gone back to using the name? (1)

## Question 9

Topic: Coding

Source: Lecture 4

Assume that our fancy SR labeler has been run on the following sentence: "Do androids dream of electric sheep?" Imagine that we ran the sentence with 2 different predicates: "dream" and "do", and obtained the following scores. NP1 = (NP(NNs androids)) NP2 = (NP(JJ electric NNS sheep)) NP3 = (PP(of (NP2)) do: NP1: 0.5, 0.3 NP2: 0.3, 0.5 NP3: 0.2, 0.4 dream: NP1: 0.4, 0.6 NP2: 0.2, 0.3 NP3: 0.4, 0.7 Assuming the standard constraints we talked about in class, what is the most likely parse? Show your work! (3)

**END OF QUIZ**