

**START OF QUIZ**

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## Question 1

Topic: Lecture 2

Source: Lecture 2

Explain how relation extraction and named entity recognition are related, and how they differ. (1)

## Question 2

Topic: Lecture 3

Source: Lecture 3

Roles like “Subject / Object” don’t translate very well across some languages (most notably between Nominative-Accusative languages like English, and Ergative-Absolutive languages, like Basque). Do you think that semantic roles are more likely to be consistent? Briefly explain why or why not. (2)

## Question 3

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 4

Topic: Lecture 1

Source: Lecture 1

Briefly describe the difference between micro- and macro-F1, which one is more appropriate for NER tagging, and why. (1)

## Question 5

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 6

Topic: Lecture 1

Source: Lecture 1

Briefly explain the role of a gazetteer, and one way of creating one. (1)

## Question 7

Topic: Lecture 2

Source: Lecture 2

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



## Question 8

Topic: Lecture 4

Source: Lecture 4

Why do you think that we pass the output of our classifier to an ILP solver instead of just incorporating the constraints into the model? (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**