

**START OF QUIZ**

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## Question 1

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 2

Topic: Lecture 1

Source: Lecture 1

Give a BIO tagging of the following sentence: “On the 24th of February 1815, the lookout at Notre-Dame de la Garde signalled the arrival of the three-master Pharaon, coming from Smyrna, Trieste and Naples.” (2)

### Question 3

Topic: Lecture 2

Source: Lecture 2

If we're building a CRF for relation extraction, what other NLP tools might be useful for generating feature vectors? (At least 3) (1)

## Question 4

Topic: Lecture 2

Source: Lecture 2

Identify the events in the following sentences, and place them in order. Identify the cues you used to determine the order. Every morning, on my walk to the University, I read an audiobook while watching for birds. I start up my laptop after I get to class, and then wait for students to arrive so I can start the lecture. (2)

## Question 5

Topic: Lecture 4

Source: Lecture 4

Along with the features described in class for non-neural SRL, suggest 2 other features that we could use. (1)

## Question 6

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 7

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 8

Topic: Lecture 3

Source: Lecture 3

Imagine that we came across the word “extrambulate” in the following sentence: “Realizing that she was going to be late for the bus, Jane extrambulated to the stop.” What verb class does this verb belong to? What are 2 features that distinguish it from the prototype of the class? (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**