

**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

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 3

Topic: Lecture 4

Source: Lecture 4

Can you think of a way to combine the two neural SRL models we looked at in class? (1)

## Question 4

Topic: Lecture 1

Source: Lecture 1

What lexical features might you use to identify the named entities in the following sentences? “Ronald Reagan? The actor? Then who’s Vice-President, Jerry Lewis? I suppose Jane Wyman is the First Lady! And Jack Benny is Secretary of the Treasury!” (At least 2)  
(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

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

## Question 7

Topic: Lecture 3

Source: Lecture 3

Thinking in terms of vector semantics, do you think that each dimension of word embeddings could be considered a “semantic fundamental” (like “speaking”, “load”, “incoherent”, etc.). Briefly explain. (1)



## Question 8

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 9

Topic: Coding

Source: Lecture 1

In class, we briefly mentioned that F1 score may be too harsh for NER (If our model finds part of an entity, it should get partial credit). Write code that calculates this more generous measure. If the system discovers the first word in the entity (ie, "Charles" for "Charles M. Burns"), it should get 0.5 points, instead of the full 1 point it would get for the whole name. (We'll stick to the first word, only - if we consider any part, it gets tricky: what if our system identifies "Charles" and "M. Burns" as two separate entities?) (3)

**END OF QUIZ**