# START OF QUIZ
# Student ID:
# 30425177,He,Hao Chen

## Question 1

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 2

Topic: Lecture 3
Source: Lecture 3

The sentences “The man ate a sandwich” and “The sandwich ate a man” are both syntactically correct (DET NN VB DT NN), but only the first one is semantically correct. With reference to theta roles, explain why this is the case. (1)

## Question 3

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 4

Topic: Lecture 1
Source: Lecture 1

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

## Question 5

Topic: Lecture 2
Source: Lecture 2

How can we use POS/morphological tagging to aid in temporal relation extraction? (1)

## Question 6

Topic: Lecture 2
Source: Lecture 2

Consider the following sentences: "James married Joyce in 2010. Their son Ulysses was born in 2013. In 2015, James and Joyce divorced." Extract all of the RDF triples you can from the sequence. (2)

## Question 7

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 8

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 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