

**START OF QUIZ**  
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## Question 1

Topic: Lecture 6

Source: Lecture 6

Explain how an MSD differs from a POS tag, and how it's similar. (1)

## Question 2

Topic: Lecture 6

Source: Lecture 6

In class, we discussed why a “Universal Morphology” might not actually be possible. Briefly explain why. (1)

### Question 3

Topic: Lecture 8

Source: Lecture 8

Why do you think that LLMs learn syntax earlier in the model than morphology? (1)

## Question 4

Topic: Lecture 7

Source: Lecture 7

Describe epenthesis in terms of edit actions. (1)

## Question 5

Topic: Lecture 8

Source: Lecture 8

Where do you think pragmatic learning (ie, intent) might fall within the layers of an LLM? Explain briefly. How might we test for it? (1)

## Question 6

Topic: Lecture 5

Source: Lecture 5

Imagine that we have some pre-trained multilingual embeddings of really high quality. We train a POS tagger for a very common language, with lots of data, embedding the data with the multilingual embeddings. At inference, we then replace the input with another language. Do you think the tagger would beat a majority baseline? Explain your reasoning, and list any assumptions. (2)

## Question 7

Topic: Lecture 7

Source: Lecture 7

What benefits might encoding MSDs with a second encoder have over a single encoder approach? Can you think of any disadvantages? (2)



## Question 8

Topic: Lecture 5

Source: Lecture 5

In DSCI 563, we discussed EM for POS tagging. Let's make it neural. Assume we have a small set of gold annotated sentences (100). How could we use contextualized embeddings to bootstrap more annotated data (assume that fine-tuning doesn't work)? (2)

## Question 9

Topic: Long

Source: Lecture 5

In class, we talked about how POS and morphological information is often latently encoded in word embeddings, but not in character embeddings. Let's think about subword embeddings, since most DL models are going to use subword representations. If a word is split, where do you think this information is encoded, and does it matter? Explain your reasoning.  
(3)

**END OF QUIZ**