

**START OF QUIZ**

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## Question 1

Topic: Lecture 7

Source: Lecture 7

Why is edit-distance only a good evaluation metric during training? (1)

## Question 2

Topic: Lecture 7

Source: Lecture 7

When generating inflections, what features of the input do you think the model most attends to? (1)

### Question 3

Topic: Lecture 6

Source: Lecture 6

What is the purpose of using normalized edit distance in the evaluation of a morphological analyzer? (1)

## Question 4

Topic: Lecture 5

Source: Lecture 5

Why is a majority tagger such a strong baseline for POS tagging? (1)

## Question 5

Topic: Lecture 8

Source: Lecture 8

Nonce words are almost always in open classes of words, but there are some exceptions (such as pronouns, which do allow some flexibility). Do you think that LLMs would react to new words in traditionally closed classes the same way as in open classes? (1)

## Question 6

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 7

Topic: Lecture 8

Source: Lecture 8

Imagine we were designing a probe to understand whether a model were gender biased. How might we design such a probe, and if we found the model to exhibit such a bias, what suggestions would you make to neutralize the bias? (2)



## Question 8

Topic: Lecture 6

Source: Lecture 6

Feature engineering can be incorporated into encoder-decoder models through the use of multiple encoders. If you could have any extra annotation for morphological analysis, and were able to pass each through a separate encoder, what types of features would you include? Do you see any potential problems with using this extra annotation? (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**