

**START OF QUIZ**

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## Question 1

Topic: Lecture 3

Source: Lecture 3

Explain the concept of linguistic anchors with respect to multilingual embeddings. (1)

## Question 2

Topic: Lecture 4

Source: Lecture 4

Could you implement Viterbi as an extension of the forward-backward algorithm? What additional constraints might be needed, if so? (1)

### Question 3

Topic: Lecture 4

Source: Lecture 4

Describe the key differences between the forward and backward steps of the forward-backward algorithm. (1)

## Question 4

Topic: Lecture 2

Source: Lecture 2

What is the role of cognates in transfer learning? (1)

## Question 5

Topic: Lecture 3

Source: Lecture 3

What benefits does delexicalization bring to the training of dependency parsers? Can you think of other tasks that might benefit from it? (1)

## Question 6

Topic: Lecture 2

Source: Lecture 2

Isolate languages do not have any known related languages (Ainu, X̣aat Kíł, and Klingon are some examples). How might you approach using cross-lingual transfer for an isolate? (2)

## Question 7

Topic: Lecture 1

Source: Lecture 1

Many existing tools and annotation formats make assumptions about the languages that they are processing. If you were creating an ML corpus for a new language, would you prefer to start from scratch, or to adapt an existing annotation schema? Would this change depending on if you were working with a Class 1 or a Class 5 language? Explain. (2)



## Question 8

Topic: Lecture 1

Source: Lecture 1

When working with underserved languages, field linguists often collect data from speakers on site. What ethical considerations must be taken into account when gathering linguistic data from these communities? (2)

## Question 9

Topic: Long

Source: Lecture 2

When two languages come into contact, a pidgin is often formed, typically incorporating lexemes, syntax, and sometimes morphology from both languages, but it is often simplified and incomplete, serving only the immediate communicative needs. Over time, if children grow up speaking the pidgin, they can expand it into a full-fledged language — a creole. Given that creoles evolve from this contact and expansion process, how might transfer learning be used to develop NLP tools for a creole language? How might the parent languages influence decisions on which language features to prioritize, and how could transfer learning from these parent languages help or hinder the development of these tools? (3)

**END OF QUIZ**