START OF QUIZ
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Question 1

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 2

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 3

Topic: Lecture 2
Source: Lecture 2

Explain the difference between domain and task, and how this difference impacts transfer learning. (1)

Question 4

Topic: Lecture 3
Source: Lecture 3

What are the benefits of using adapter layers instead of fine-tuning? (1)

Question 5

Topic: Lecture 4
Source: Lecture 4

Are there any situations where the alpha and beta score at a particular timestep would be equal? (1)

Question 6

Topic: Lecture 2
Source: Lecture 2

In transfer learning, how do you decide which layers of a pre-trained model to freeze and which to fine-tune when adapting it to a new language or task? Give an example of when you might choose to freeze or fine-tune specific layers. (2)

Question 7

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 8

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 9

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