START OF QUIZ
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Question 1

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 2

Topic: Lecture 4
Source: Lecture 4

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

Question 3

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 4

Topic: Lecture 1
Source: Lecture 1

Many languages are losing speakers over time. Briefly describe why this might be happening, and how NLP is contributing to this effect. (1)

Question 5

Topic: Lecture 1
Source: Lecture 1

Describe the concept of a "dialect-chain", and why the distinction between languages and dialects is not clearly-defined. (1)

Question 6

Topic: Lecture 2
Source: Lecture 2

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

Question 7

Topic: Lecture 3
Source: Lecture 3

Imagine that we find a database lying around, and it's been very poorly maintained and documented. All we know is that it contains word embeddings for a language written in Arabic script (assume we can't read it, and the only Arabic speakers we know also can't read it - it's in a language they don't know). How might we go about trying to identify the language that it's written in, without finding speakers of all of the Arabic-derived languages? (2)

Question 8

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 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