

**START OF QUIZ**  
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## Question 1

Topic: Lecture 8

Source: Lecture 8

What information do you think the word tokens on the stack/buffer are providing to the ML SR parser? (1)

## Question 2

Topic: Lecture 5

Source: Lecture 5

Why do we only care about the "upper triangle"? (1)

### Question 3

Topic: Lecture 8

Source: Lecture 8

Describe what we mean by a cascaded learning model, and one advantage and disadvantage to using one. (1)

## Question 4

Topic: Lecture 6

Source: Lecture 6

Describe the difference between top-down and bottom-up parsing (1)

## Question 5

Topic: Lecture 6

Source: Lecture 6

The CYK parser only applies those rules that apply to its tokens, but the Earley parser expands its rules to every viable rule, which seems inefficient. Explain why this doesn't lead to a lot of bad parses. (1)

## Question 6

Topic: Lecture 5

Source: Lecture 5

Let's say we wanted to modify PARSEVAL to take ambiguity into account. How might we use a PCFG and two gold references to account for ambiguous parsing? (2)

## Question 7

Topic: Lecture 7

Source: Lecture 7

In class, we saw that LLMs can struggle with long-term dependencies, why do you think that is, given what you know about language models and dependency parsing. (2)



## Question 8

Topic: Lecture 7

Source: Lecture 7

A deque is a data structure that mimics the operations of both a stack and a queue (ie, items can be added or removed to either end - check your 512 notes!). Do you think this data structure would be sufficient to replace the stack and buffer from SR parsing? Justify your answer. (2)

## Question 9

Topic: Long

Source: Lecture 6

Often, modern NLP tools work not with words, but with subword units. What modifications would we need to make to the Earley parser in order to work with subword units (for example: "agreement" might get split into "agree" and "-ment"). Where would they need to occur in the parser, and how do you think it might benefit and harm the algorithm? (3)

**END OF QUIZ**