# 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 6
Source: Lecture 6

In class, we mentioned that the Earley and CYK parsers are both cubic complexity, but that in practice, the Earley Parser is typically faster. Why do you think that is? (1)

## Question 3

Topic: Lecture 7
Source: Lecture 7

What are the conditions for completing a parse in SR parsing, and under which conditions might they not be met? (1)

## Question 4

Topic: Lecture 7
Source: Lecture 7

Briefly describe how the stack changes for a SHIFT operation. (1)

## Question 5

Topic: Lecture 6
Source: Lecture 6

Describe the purpose of the dot. (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 8
Source: Lecture 8

Imagine that we have a dependency parser that has a very good UAS (90+), but a very bad LAS (50-). Do you think that we could use the output of this parser as input to a neural translation model as is, or do you think that we should first re-train the labeling part of the algorithm to increase LAS? Doing both is probably the best solution, but I'm asking if you think that we could use the output of the existing model, even as we try to improve the quality of the labels. Explain. (2)

## Question 8

Topic: Lecture 5
Source: Lecture 5

Do you think we could modify CYK with a feature grammar? What benefits would it provide, and what difficulties would it present? (2)

## Question 9

Topic: Long
Source: Lecture 5

In class, all of our parsing examples contained a single clause, so were relatively easy to parse. Consider the sentence: "Xihan finished her work early, so she decided to go for a walk in the park.". This sentence has 2 clauses (one dependent, and one independent). Draw out the chart for the dependent clause (you can start with "she"). You can provide any reasonable grammar (the only POS you might need that we haven't talked about in class is "TO" for non-finite verb markers like "to"), although the clause must be produced from an "S" rule. Secondly, describe how you would represent multiple S clauses in a grammar, and why the parser wouldn't stop when it successfully parses one of them. (3)

# END OF QUIZ