

**START OF QUIZ**

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## Question 1

Topic: Lecture 6

Source: Lecture 6

Neural Q/A (even before ChatGPT) was significantly better than previous models. Beyond just the traditional benefits of deep learning that we know of, (such as longer dependencies, etc.), why is this the case? (2)

## Question 2

Topic: Lecture 5

Source: Lecture 5

Bert accepts a single string as input, but Q/A requires a question and a potential source. Describe how we deal with this problem. (1)

### Question 3

Topic: Lecture 5

Source: Lecture 5

Explain why a good IR tool is necessary to perform Bert-based Q/A. (1)

## Question 4

Topic: Lecture 7

Source: Lecture 7

How might we use SRL in the process of slot-filling? (1)

## Question 5

Topic: Lecture 7

Source: Lecture 7

Imagine that we have a great dialogue Q/A system that can fill slots with ease, and return relevant answers with high probability. However, our ASR system is pretty bad (it does really poorly with accents that are not "General American"). The model was trained on standard English text. Describe a few of the errors you can imagine the system making, and how we can improve the quality of our model (assume we can't improve the ASR). (2)

## Question 6

Topic: Lecture 6

Source: Lecture 6

What tools are necessary to extract an RDF triple from a question? Provide at least 2, and briefly explain. (1)

## Question 7

Topic: Lecture 8

Source: Lecture 8

Explain why we train BERT dialogue systems with delexicalized entries. (1)



## Question 8

Topic: Lecture 8

Source: Lecture 8

Imagine that we have a dialogue system trained with reinforcement learning. What part of a dialogue might result in a negative reward (ie, a penalty) to the system's policy algorithm?  
(2)

## Question 9

Topic: Coding

Source: Lecture 5

Imagine that we are using a Q/A system for movie recommendation (by asking questions like “What is a good movie like Shawshank Redemption?”). Bert is likely not going to be sufficient to answer this question. Describe how you could modify the Bert Q/A reader to find good answers. (3)

**END OF QUIZ**