## START OF QUIZ Student ID: 30542179, Yang, Yimei

Topic: Lecture 6 Source: Lecture 6

Briefly describe why entity-linking is necessary in any Q/A system. (1)

Topic: Lecture 5 Source: Lecture 5

Describe the two ways that we can construct  $\mathbf{Q}/\mathbf{A}$  databases, and how they differ. (2)

Topic: Lecture 8 Source: Lecture 8

When training BERT Dialogue systems, we often delexicalize the entries. Briefly explain the benefits this can provide to the model. (1)

Topic: Lecture 6 Source: Lecture 6

Explain the purpose of mean reciprocal rank, and how it works. (1)

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)

Topic: Lecture 5 Source: Lecture 5

Briefly describe a "factoid-based" question, and one way that a QA system might answer it.

Topic: Lecture 7 Source: Lecture 7

Describe at least one piece of grounding in real life (outside the examples given in class). (1)

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)

Topic: Long

Source: Lecture 7

Imagine that I'm working with a client who wants a dialogue system that provides advice for his company. It has to fit on a phone, but might end up in regions with very limited cell service, so it has to be locally installed. We have limited memory (let's say 1Gb). How would we go about building such a tool? What are some questions we should ask the client? How would we provide the required functionality? Is it even possible? (3)

# END OF QUIZ