

**START OF QUIZ**

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## Question 1

Topic: Lecture 4

Source: Lecture 4

Why is FOL more expressive than ontologies (Description logics)? ie, what can FOL do that ontologies can't? (1)

## Question 2

Topic: Lecture 2

Source: Lecture 2

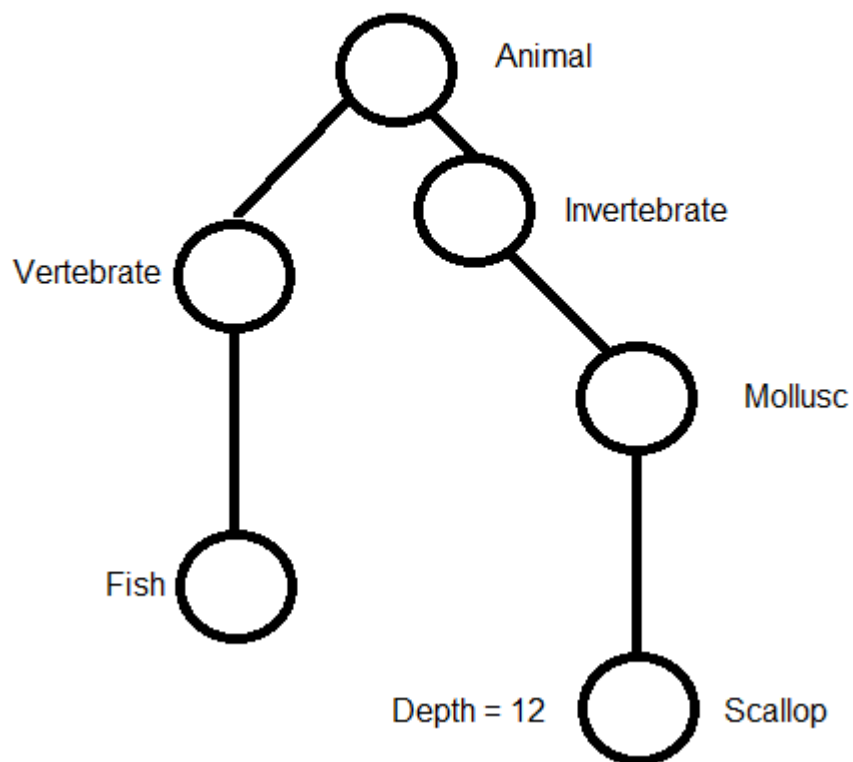
In class, I mentioned that we rarely do WSD explicitly, because we would need one model / word. In COLX 521, we saw that we could lemmatize words to reduce them to a common form. Why couldn't we do something similar (like reducing all synonyms to a common hypernym) for WSD? (2)

### Question 3

Topic: Lecture 1

Source: Lecture 1

Given the following tree, what is the WuP similarity between the two leaf nodes?



## Question 4

Topic: Lecture 1

Source: Lecture 1

What are the benefits of representing synonymy and hypernymy in a graph? Do you think there could be a better data structure or way of representing the information? Briefly explain. (2)

## Question 5

Topic: Lecture 3

Source: Lecture 3

Given that A is True, B is False, and C is True, list 3 complex statements that are true, and 2 that are false.

(1)

## Question 6

Topic: Lecture 3

Source: Lecture 3

Given the following ambiguous sentence, give both meanings in unambiguous FOL. I saw a bird with binoculars.

## Question 7

Topic: Lecture 4

Source: Lecture 4

How would you describe the following sentence in FOL (you don't need to write the FOL statement - just describe how it would be structured)? After climbing a great hill, one only finds that there are many more hills to climb.



## Question 8

Topic: Lecture 2

Source: Lecture 2

What is the meaning of "One document, one sense" as it applies to Word Sense Disambiguation? (1)

## Question 9

Topic: Long

Source: Lecture 4

Links in an ontology can be considered as positive predicates (ie, attributes and relationships that exist). Do you think it is worthwhile to create negative predicates (ie, Hamlet is not alive), etc.? What might be some benefits and disadvantages of such an approach, and does one outweigh the other? (3)

**END OF QUIZ**