START OF QUIZ
Student ID:
52196086,Ahluwalia,Max

Question 1

Topic: Lecture 3
Source: Lecture 3

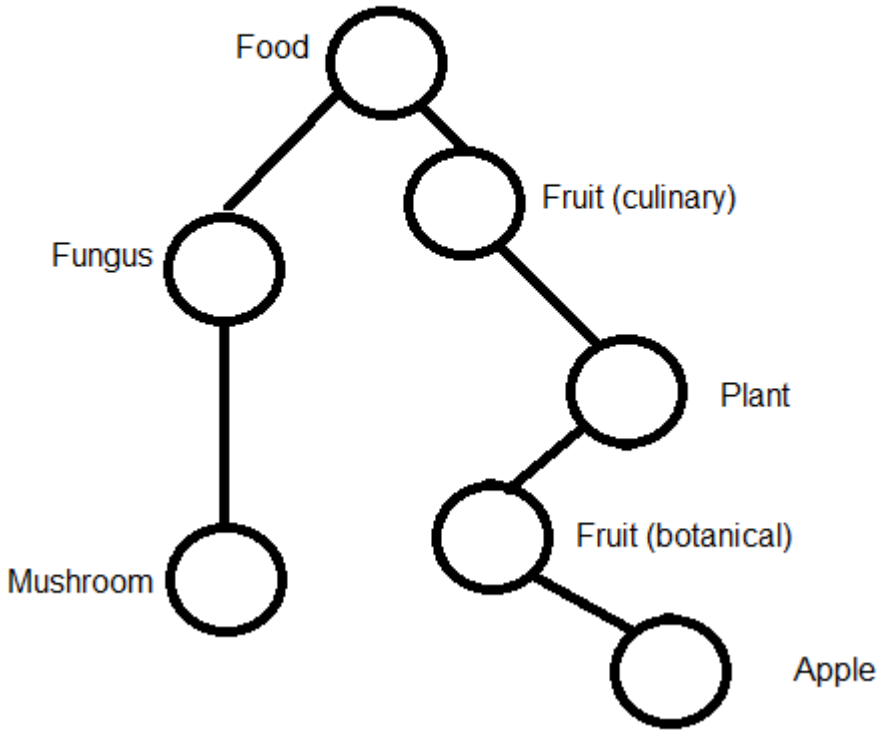
Given that A is True, B is False, and C is True, list 3 complex statements that are true, and 2 that are false.

(1)

Question 2

Topic: Lecture 1
Source: Lecture 1

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



Question 3

Topic: Lecture 4
Source: Lecture 4

In class, we went over some common OWL and RDFS constraints that we can place on predicates, but we only ever attached one. Can you think of any instances of bivariate (ie, two parameter) predicates that could use multiple constraints? If so, briefly describe the predicate and its constraints, and if not, briefly describe why this is unnecessary. (2)

Question 4

Topic: Lecture 4
Source: Lecture 4

Some verbs in English can take either one or two objects (such as ”see” - I see a bird vs. I see a bird with binoculars). Explain, in terms of lambda calculus, why we would need separate predicates for these different uses of ”see”. (2)

Question 5

Topic: Lecture 2
Source: Lecture 2

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

Question 6

Topic: Lecture 1
Source: Lecture 1

What is the relationship between sour and sweet?

Question 7

Topic: Lecture 3
Source: Lecture 3

Given the following ambiguous sentence, give both meanings in unambiguous FOL. The garbage truck has four wheels and flies.

Question 8

Topic: Lecture 2
Source: Lecture 2

What is the purpose of a dictionary gloss? (1)

Question 9

Topic: Long
Source: Lecture 2

Neural models are often seen as a black box, where all we can observe is the output. That said, there is a lot of information available in the output of a neural model. Briefly describe how you might be able to use tools like LIWC (or GI) to build an AI-detector. Please list any assumptions about available data and experiments you would have to run. (3)

END OF QUIZ