Question 1 (20 points)

For all of the following pairs of sentences (a-b), show whether the relation between (a) and (b) is entailment, conversational implicature or presupposition. Use the negation and cancellation tests that were discussed in class.¹

i (a) It was John who painted my bicycle pink.
   (b) My bicycle has been painted pink.

ii (a) John painted my bicycle pink.
   (b) My bicycle has been painted pink.

iii (a) The butler might have done it.
   (b) It is not the case that the butler must have done it.

iv (a) Mary is tall and thin.
   (b) Mary is thin.

v (a) Mary is tall or thin.
   (b) It is not the case that Mary is both tall and thin.

vi (a) Mary is tall or thin.
   (b) Mary exists.

vii (a) After John kissed Mary, she hit him.
   (b) John kissed Mary.

viii (a) (Answer to the question Is John intelligent?) Well, he’s extremely nice.
   (b) John is not intelligent.

¹For those of you who did not attend the class on presupposition and downloaded the slides from the website: the summary on the last slide contains an error, presuppositions cannot be cancelled.
Question 2 (25 points)

Consider the following sentences:

i Mary had pizza or icecream.

ii Mary did not have pizza or icecream.

A. From (i), we can infer that Mary did not have both pizza and icecream.
   Someone concludes that the denotation of English or should therefore be
   exclusive (‘p or q but not both’), rather than inclusive (like ∨ or set union).
   What would your counterargument be, based on the data in (ii)?

B. Give an alternative explanation for the exclusive inference in (i) in terms
   of scalar implicature. Show how your explanation accounts for the inter-
   pretation of both (i) and (ii). Make all reasoning steps explicit.

C. According to the Gricean view on implicature, implicatures are not inher-
   ent grammatical properties of words or sentences, but only arise in context
   when we reason about the speaker’s intentions. Explain briefly how this
   accounts for the contrast between (i) and (iii), which does not exclude
   candidates with both an MA degree and five years of experience.

iii Candidates should have an MA degree or at least five years of experience
   in the field.

Question 3 (35 points)

Read the Introduction and Section 3 ‘Absolute Adjectives’ in the 2007 paper
‘Vagueness and Grammar: The Semantics of Relative and Absolute Gradable
Adjectives’ by Chris Kennedy, available at:
http://semantics.uchicago.edu/kennedy/docs/vaguenessandgrammar.html

Describe the differences between relative and absolute adjectives according to
the following guidelines, write no more than 1 page:

A. Characterize the relative/absolute distinction in terms of the placement
   of the standard on the scale associated with the adjective.
   Distinguish between subclasses of absolute adjectives as needed.

B. Describe 3 distinctions between relative and absolute adjectives and give
   evidence for these distinctions. Explain two pieces of evidence for each
   distinction.

C. Use the modifiers slightly and completely (or perfectly) to infer about the
   scale structure of 3 relative adjectives and 6 absolute adjectives (pick 3
   absolute adjectives from each subclass). In your answer, indicate for each
   adjective whether it has an open scale, a lower-closed scale, an upper-
   closed scale, or a totally closed scale.
D. Bonus:

(i) Can you show a correlation between the scale structure of an adjective and the placement of the standard that is used in its interpretation?

(ii) Can you suggest an explanation how the placement of the standard that you discuss in (A) might affect/account for the distinctions you show in (B)?

Question 3 (20 points)

The definition of POS

A. Provide lambda definitions for the positive morpheme POS for absolute adjectives. You need to give two definitions of POS:

(i) In the definition for minimum-standard adjectives, use a function S-MIN of type \((ed)d\) that takes a minimum-standard adjective as an input and returns the minimum value on its scale.

(ii) In the definition for maximum-standard adjectives, use a function S-MAX of type \((ed)d\) that takes a maximum-standard adjective as an input and returns the maximum value on its scale.

Note: You do not need to define S-MIN and S-MAX, assume that they are already defined and you can use them in your definitions of POS.

B. Give a compositional analysis for the sentences:

(i) [The glass] [is [POS full]]

(ii) [The table] [is [POS dirty]]

• Draw a tree and decorate it with types and denotations.

• Assume that \(\text{THE}\) is a function of type \((et)e\) that takes a function of type \(et\) as an input and returns an entity that satisfies it.