You are not allowed to co-operate with your fellow classmates on this exam. Clarification questions should be sent to me. In evaluating your responses, I will grade you on correctness, clarity, and precision. Your answers should present clearly the logic behind your choices. Make sure that your trees do not violate X-bar theory.

1: Assuming the judgements given, give an account of the following pattern of grammaticality.\(^1\) Your explanation should make reference to X-bar theory, in particular the complement-adjunct distinction and one-substitution. Focus on the bracketed constituents. Make sure you determine the complement/adjunct status of the PPs of the match/of the riots and at the match/in the bar (5pts.). Draw trees for the bracketed constituents in (1b) and (1c). For the ungrammatical constituents, draw as much of the tree as you can and indicate where ungrammaticality enters into the picture. (15pts.)

(1) a. i. *[The discussion of the match] was more animated than [the one of the riots].
   ii. [The discussion at the match] was more animated than [the one in the bar].
   b. i. [The discussion of the riots and their implications] was full and frank.
   ii. [The discussion at the match and in the bar] was full and frank.
   iii. *[The discussion of the riots and in the bar] was full and frank.
   c. i. [The discussion of the riots in the bar] was full and frank.
   ii. *[The discussion in the bar of the riots] was full an frank.

2: (2) is ambiguous. Point out the ambiguities (5pts.) and construct trees to go with each ambiguity (10pts.)

Assume for this problem that why starts off merged as an adjunct on VP: \([VP [VP . . .] [AdvP why]]\).

(2) Why does Mary believe that John resigned?

Only one of the readings available in (2) is available in (3).

\(^1\)If your judgements differ, please indicate this on your exam and see if you can come up with an account of your judgements in addition. This is quite optional.
(3) Why does Mary believe the rumor that John resigned?

Which reading is available here? (2pts.) Construct a tree for the available reading (4pts.). Making reference to islands, explain why the other reading is unavailable here. As a part of an explanation construct a tree for the unavailable reading (4pts.) and indicate on the tree why the missing reading is unavailable (4pts.).

The following sentences are essentially unambiguous.

(4) a. Where did Tom say that Mary knows French?
   b. When does Tom believe that Mary saw the secret memo

On their primary interpretations, (4a) asks for the location of Tom’s saying that Mary knows French, and (4b) asks for the time at which Mary saw the secret memo according to John. What are the missing/less easy to access interpretations? (3pts.) Why are they missing/less easy to access? (3pts.)

3: Consider the following examples.

(5) a. I will be in my office [if you should need me].
   b. I will be in my office [should you need me].
   c. *I will be in my office [if should you need me].
   d. *I will be in my office [should if you need me].

Draw a tree for (5b). (12pts.) Why are the bad examples bad? (6pts.)

4: Consider the following data from Dutch.

(6) In matrix clauses, the highest verb appears after the first constituent. The other verbs appear at the end.
   a. Jan at die appel.
      Jan eat.Pst the apple
      ‘Jan ate the apple.’
   b. Jan moet die appel eten.
      Jan must the apple eat
      ‘Jan must eat the apple.’
   c. Jan heeft die appel gegessen
      Jan has the apple eaten
      ‘John has eaten the apple.’
   d. Jan moet die appel gegessen hebben
      Jan must the apple eaten have
      ‘John must have eaten the apple.’
In the above examples, the subject appears in the first position. But this is not necessary. The object can also appear in first position and the interpretation there is similar to the interpretation found with topicalization in English, *Fish, I like. But lamb, I hate.*

a. Die appel at Jan gisteren
   the apple eat.Pst Jan yesterday
   ‘The apple, John ate yesterday.’

b. Gisteren at Jan die appel
   yesterday eat.Pst Jan the apple
   ‘Yesterday John ate the apple.’

We can analyze the above data as showing us the following things:

(8) a. T and V are head-final in Dutch.
    b. C is head-initial in Dutch.
    c. In matrix clauses, T moves to C.
    d. T is always occupied by the highest verb.
    e. An XP moves to [Spec, CP] in matrix clauses.

a. Given the above assumptions draw a tree for (7b). Assume that *Gisteren ‘yesterday’* is an AdvP that starts off adjoined to the VP.² (9pts.)

Support for our assumptions comes from the fact that in embedded clauses in Dutch where there is always an overt complementizer *dat ‘that’,* the highest verb stays behind at the end of the clause.

(9) a. Ik denk dat Jan die appel at.
    I think that Jan the apple eat.Pst
    ‘I think that John ate the apple.’

b. Ik denk dat Jan die appel eten moet.
    I think that Jan the apple eat must
    ‘I think that John must eat the apple.’

In these examples, the C of the embedded clause is already occupied by *dat ‘that’* and so *moet ‘must’* cannot move to C and stays in its final position. The specifier of *dat* stays unfilled.

b. Given the above assumptions draw a tree for (9a). (9pts.)

c. Now consider German which is very similar to Dutch. All the Dutch examples you have seen so far have direct counterparts in German. But there is an important difference. In German, with some verbs, the embedded complementizer *dass ‘that’* is optional. When the complementizer is present, German looks like Dutch. But when the complementizer *dass ‘that’* is missing, we get the following pattern.

²You could in principle recycle the answer to this question for another question earlier in the exam.
(10)  

a.  daß ‘that’ is present:

   Sie sagte \( CP \) daß wir keine Bücher kaufen sollten]

   she said \( CP \) that we no books buy should

   ‘She said that we should not buy any books.’

b.  daß ‘that’ is absent:

   Sie sagte \( CP \) wir sollten keine Bücher kaufen]

   she said \( CP \) we should no books buy

   ‘She said that we should not buy any books.’

What accounts for the different positions of \( sollen \) ‘should’ in (10)? (9pts.) Draw a tree for (10b). (9pts.)

5.  Provide derivations for the grammatical sentences and explain why the ungrammatical ones are ungrammatical. (16pts.)

(11)  

a.  Robin is likely to be elected.

b.  *Robin is likely that will be elected.

c.  *It is likely Robin to be elected.

d.  It is likely that Robin will be elected.

e.  Robin seems to be likely to win the race.

f.  It seems that Robin is likely to win the race.

g.  It seems that it is likely that Robin will win the race.

h.  *Robin seems that it is likely to win the race.