Use the LGB framework for these exercises (summarized in Part D of the HO "Overview of Binding Theory 1973-1986").

3 points
1. Suppose that the binding conditions apply at exactly one level of representation. Use the following examples, and at least some additional evidence, to show that that level must be S-structure rather than D-structure.
   a. *John is believed is intelligent
   b. They seem to each other to be intelligent

2 points
2. Most theories explicitly define c-command as irreflexive (i.e., nothing bears the c-command relation to itself). What goes wrong for Binding Theory if we make c-command reflexive? Present at least 2 distinct difficulties that would arise. Give evidence.

4 points
3. For this exercise, we use the term ‘governing category (GC)’ generically, to denote the domain in which an anaphor must be bound and a pronoun free, however it is characterized.
   a) In classic generative grammar, the GC was the minimal clause containing the anaphor or pronoun, the simplest version of GC ever. Present and discuss some examples where it works, and some others where it seems to fail. For the latter, were there any grammatical operations that allowed it to succeed?
   b) Chomsky (1973) rejected minimal clause in favor of Tensed Sentence Condition and Specified Subject Condition. These were ultimately incorporated into the LGB formulation (as part of the definition of ‘SUBJECT’), and augmented by government:
      \[ \alpha \text{ is a governing category for } \beta \text{ if and only if } \alpha \text{ is the minimal category } [i.e., XP] \text{ containing } \beta, \text{ a governor of } \beta, \text{ and a SUBJECT accessible to } \beta. \]
      SUBJECT = AGR in a finite clause; NP of S in an infinitival; NP of NP in an NP.
      \[ \rightarrow \text{What still works and what goes wrong if we drop AGR as a SUBJECT (simplifying to just subject of S or NP)? Discuss with analysis of specific examples.} \]
      \[ \rightarrow \text{What still works and what goes wrong if we drop “a governor of } \alpha \text{” from the definition? Discuss with analysis of specific examples.} \]

2.5 points
4. Early versions of the modern theory of anaphora (as in "Conditions on Transformations" or "Conditions on Rules of Grammar") distinguished between ‘specified’ subjects and other subjects. Discuss and illustrate the notion ‘specified subject’, and exactly how specified subjects differ from other subjects. Then show how this complication in the theory could be (and, in fact, ultimately was) eliminated.

4.5 points
5. As far as Binding Theory is concerned, the trace of ‘NP movement’ (an A-trace) has the same abstract distribution as a lexical anaphor (i.e., they occur in the same kinds of structural positions (as proposed by Chomsky "Conditions on Rules of Grammar" and carried over into LGB)).
   a) Discuss and illustrate this parallelism with grammatical and ungrammatical examples (and indicating just what the relevant structural configurations are).
   b) Show that the actual, as opposed to the abstract, distribution of A-trace and lexical anaphors is complementary rather than identical (that is, in actual sentences, where one is good, the other is bad).
   c) Explain the phenomenon in (b). That is, show how the complementary distribution follows from independent principles. Be explicit.
9 points

6. Explain the ungrammaticality of each of the following examples within the LGB Binding Theory (as augmented by the handout where relevant). **Be explicit about all the rules or principles you use in your explanation**, and **show relevant portions of the structures with trees**. **When Governing Category is relevant, say exactly what the GC is, and how you determined it.** If some examples cannot be handled by devices we have discussed, indicate precisely how they fail. [In this exercise, assume that ‘John’, ‘Bill’, and ‘Harry’ denote males while ‘Mary’, ‘Susan’, and ‘Barbara’ denote females.]

   a. *I gave John's pictures to himself
   b. *Mary saw Bill's picture of herself
   c. *Barbara tried PRO to solve the problem [with Barbara and PRO not coreferential]
   d. *They believe Mary to like each other
   e. *Mary believes her to be clever [with Mary and her coreferential]
   f. *Susan admires PRO