Topics for test 3

The following are the topics to be covered. The proportion of the test covering each will approximate the proportion of the classes so far that have been devoted to that topic. Your homework and the collection of old tests will provide specific examples of the kinds of questions I might ask.

Analysis. Two sorts of questions are possible here corresponding to the sorts of analyses you have done in chs. 5 and 6: (i) analysis by truth-functional connectives only, with atomic sentences as the ultimate components (the focus would, of course, be on conditionals —i.e., on the symbolic representation of if, only if, and unless) and (ii) analysis using truth-functional connnectives and the ideas of predicates, individual terms, and functors.

   In the case of the latter sort of analysis, you might be asked to preserve pronouns, representing them using abstracts and variables. (You will not find questions of this sort in the exams before 2006, but your homework on this topic and exercise 2 for 6.2 provide further examples.)

Synthesis. Again this might take two forms, depending on whether the expressions abbreviated by letters were are complete sentences or were terms, predicates, and functors—i.e., depending on whether the question is directed at ch. 5 or ch. 6.

Derivations. Be able to construct derivations to show that entailments hold and to show that they fail. I may tell you in advance whether an entailment holds or leave it to you to check that using derivations. There will be some derivations where detachment and attachment rules may be used and where they will shorten the proof. But there will be others where you must rely on other rules, either because detachment and attachment rules do not apply or because I tell you not to use them. In particular be ready to use the rule RC (Rejecting a Conditional) from ch. 5.

   In the case of a derivation that includes forms involving predicates and functors, you won't be asked to present a counterexample if the derivation fails (though you will still need to be able to recognize that such a derivation has failed). In short, the test won't cover the new material introduced in 6.4.