

This is meant to be study guide. There may not be questions from every point. There may be questions that combine more than one point.

1. The notions of a morpheme, allomorphy and morphological process.
2. Understanding of morphological processes discussed in notes. You do not need to memorize the processes, just make sure you understand how they work.
3. Basic concepts of formal language theory. The notions of alphabet, language, and strings.
4. Basic notions of finite state automata.
5. What makes a language regular.
6. How to construct regular expressions for a given language.
7. How to design a dfa and/or nfa for a given language.
8. Being able to describe a language that would be recognized given a dfa, nfa, or regular expression. This is the reverse of the two previous points.
9. What does it mean to take the intersection, concatenation, union and Kleene star of a language.
10. Being able to tell whether one can use the pumping theorem for fal's to decide whether a language is a fal or not; and using it if it is usable.
11. Designing a finite state automaton to model morphotactics; like we did in hw4.
12. How to decide on the word class a word belongs in.
13. Being able to draw the possible constituent trees for a given natural language expression and a grammar.
14. Given a set of grammatical and ungrammatical sentences as data, being able to identify the constituent structure of the grammatical sentences.
15. Basic notions about grammars and languages they generate, such as alphabet, start symbol, terminal versus non-terminal symbols, rewrite rule, derivation, constituent tree, and so on. Especially important is the distinction between grammar, derivation, parse (or constituent structure) tree and the language generated by the grammar.
16. Given a context-free grammar, being able to describe the language it generates.
17. Being able to write a context-free grammar for a given language, and being able produce derivations and parse (constituent structure) trees.