## Budget your time. 30 points total. 80 minutes.

The number of points assigned to each part is indicated by a number in brackets.
Grade scale. Percentagewise, this is in bands of $7 \%$, but the way the whole numbers work out is as follows. Read the following as "number or above: grade": $30 \mathrm{~A}, 28 \mathrm{~A}-$, $26 \mathrm{~B}+, 24 \mathrm{~B}, 21 \mathrm{~B}-, 19 \mathrm{C}+, 17 \mathrm{C}, 15 \mathrm{C}-$.

1. [8] Fill in the missing labels for the nodes in the tree below. Where a node is the maximal projection of a lexical item, indicate this with the standard "X-bar" notation (e.g., NP for the maximal projection of a noun, $v^{\prime}$ for an intermediate projection of $v$ ). The sentence is People with shovels should clear sidewalks. The arrow is for use in question 4.
(1)

2. [6] Yes or No. In the sentence for which the structure is given in (1)...
(a) Is should clear a constituent?
(b) Is clear sidewalks a constituent?
(c) Is sidewalks a complement?
(d) Is should a specifier?
(e) Is with shovels an adjunct?
(f) Does the MP (that you wrote) dominate the $\mathrm{T}^{\prime}$ (that you wrote)?
3. [1] Circle one. The verb shown in the structure in (1) above is...
ditransitive / transitive / unergative / unaccusative
4. [1] C-command. The arrow in the tree above points to a node. Circle every node in the tree that node c-commands.
5. [1] $\theta$-role. Name the $\theta$-role that People with shovels has in (1).
6. Suppose we start building a structure for a sentence, and at a certain stage we wind up with a $\nu \mathrm{P}$ as shown (abstractly) below in (2). Note: The superscripts are just for identification purposes-they aren't part of the structure, I just need to be able to refer to the individual nodes.
Ok, on this: This is an unergative verb-it has just an Agent (though the UTAH does not really differentiate well between Experiencers and Agents, so if you said Experiencer that would be ok). A few people missed some of the questions here and there. There were three $[u \mathrm{~N}]$ features: one on each P , and one on $v$. The structure of the sentence has one PP inside another, so in chairs with arms is the only sentence that is really compatible with this structure.
(2)

(a) [1] Name the $\theta$-role that the $\mathrm{NP}^{a}$ has.
(b) [1] Name the operation (Merge, Adjoin, Move) that connected $\mathrm{P}^{k}$ and $\mathrm{NP}^{b}$.

Merge
(c) [1] How many $\left[u \mathrm{~N}^{*}\right]$ features were there-total—in these lexical items initially?

Four
(d) [1] Which of the following three sentences might plausibly include the $\nu \mathrm{P}$ in (2)?

1. Give estimates about expenses to Pat by Friday.
2. Performers without traces of talent sang on stage.
3. Soup with bacon boiled with vigor on TV.
4. [1] Circle one. The verb shown in the structure in (2) is. . .
ditransitive / transitive / unergative / unaccusative
5. Suppose you had a sentence with the abstract structure given below in (3). I have provided the pronunciation of two lexical items (the NP, John, and the bare (uninflected) form of the verb, cook).
There were a couple of people who didn't quite see that Prog is a form of be that puts the verb in the "present participle" form (collapsing). And for the most part, people got the motivations for Merging right. If you missed one or both of these, make sure you figure out why my answer is the right one.
(3)

(a) [1] Draw arrows in the tree that show, when things moved, where they moved from and to.
(b) [1] Write the sentence that this would be the structure for.

John was cooking quinoa.
(c) [1] What was the motivation to Merge $v$ and VP?

The Hierarchy of Projections-vP was finished, Prog was next on the Hierarchy.
(d) [1] What was the motivation to Merge $\mathrm{T}^{\prime}$ and NP (John)?

EPP, strong $\left[u \mathrm{~N}^{*}\right]$ feature of T
9. [2] Binding Theory I. Consider the sentence in (4), which is "trying to mean" John told himself that Mary didn't omit him (John) intentionally, and answer the questions about it listed below.
(4) $\quad \mathrm{He}_{i}$ told $\mathrm{John}_{i}$ that Mary didn't omit himself intentionally. $^{2}$.
(a) [1] Which noun phrase(s) bind John in (4)? He-and not himself.
(b) [1] Which Principle of Binding Theory is not violated in (4)? Principle B.
10. [2] Binding Theory II. Now consider the sentence in (5), which is "trying to mean" Mary convinced herself that she (Mary) would win, and answer the questions about it listed below.
(5) $\quad$ Mary ${ }_{i}$ convinced her $r_{i}$ that herself $f_{i}$ would win.
(a) [1] Which noun phrase(s) bind herself in (5)? Mary and her.
(b) [1] Which Principle of Binding Theory is not violated in (5)? Principle C.

We talked through this in class, mostly. But the thing to remember (for any question that asks about "binding") is that "binding" is defined like this: $X$ binds $Y$ if $X$ ccommands $Y$ and $X$ is co-indexed with $Y$. In particular, the binding domain does not enter into it-binding occurs no matter what the binding domain is. However, the Principles of Binding Theory do care about the binding domain.

So, in (??), he does not bind Bill because he does not c-command Bill, so one of the defining properties of binding is absent. Whether co-indexed or not, they are not in a binding relationship. For (??), Bill does c-command he and so if they are co-indexed, Bill will bind he. However, because he is inside a smaller clause that doesn't contain Bill, the fact that Bill binds he is not a problem.

I'm not really sure why I had the last question be worth 2 points while the rest of them were worth 1 point, given that the task is not significantly more challenging than the tasks that came before it. But, nevertheless, I counted it as two points.

