

Problem	Points	Credit
1. Nomenclature (one structure)	30	
2. Explain relative stabilities based on logic arguments of organic chemistry	20	
3. Chair conformations or Chain conformations or Stereochemistry or 2D/3D structures, hybridization	25	
4 Acid/base equations, draw mechanism details, estimate K_{eq} , explain answer	24	
5. S_N and E mechanisms, including stereochemical details	40	
6. Predict products (20)	30	
7. Propose short syntheses (2)	30	
8. Carbocation rearrangement	15	
9. Free Radicals, Predict products provide mechanism	30	
Total	244	

This is a long exam. It has been designed so that no one question will make or break you. The best strategy is to work steadily, starting with those problems you understand best. Make sure you show all of your work. Draw in any lone pairs of electrons, formal charge and curved arrows to show electron movement in mechanism and explanation problems. If resonance is part of an answer, draw the best resonance structure, plus at least one additional resonance structure to show that resonance is present. Only write answers in the space available. Do your best to show me what you know in the time available.