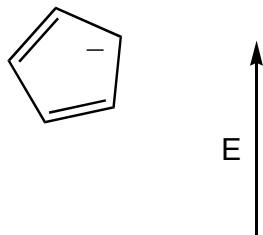


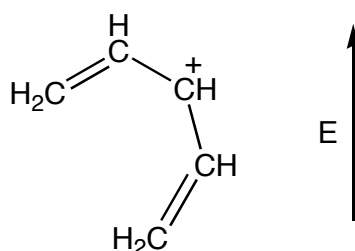
Chemistry 3371, Quiz 5

Name _____ Recitation Day _____ March 4, 2005

1) (5 points) Show with a diagram the relative energies and electron population of the π molecular orbitals in the ground state. Only the relative orbital energies are required.



2) (6 points) Draw the π -molecular orbitals of the pentadienyl cation as linear combinations of p-type atomic orbitals on each carbon in order of increasing energy vertically and show the electron population of the orbitals.



3) (9 points) Give products with stereochemistry for the following electrocyclic reactions. Indicate for each if the transition state is Huckel or Mobius.

