## Chemistry 651

## Problem set 3

Due: 23 May 2006

From your text,

- $1.\ 7.23$
- $2.\ 7.27$
- $3.\ 7.31$
- 4. Use either your text, or the literature to define the bulleted items on page 356 (third edition).
- 5. Write the Hartree Fock equations for the effective one electron HF operator for the  $\sigma_g 1s$ and  $\pi_g 2p$  orbitals of  $N_2$  using a minimal basis set (1s,2s,2p) for each atom.