

## **Hildebrandt's CHM 151 Exam #3**

### **Short List**

**Thursday April 22, 2010**

(may differ by 1-2 questions on final draft)

1. Application of  $PV=nRT$
2. Atomic Size (Radius)
3. Bond Energies to predict Heat of Reaction
4. Bond Angles
5. Dalton's Law of Partial Pressure
6. Electronegativity
7. Electronic Configuration of Ions
8. Formal Charge
9. Hybrid Orbital Systems
10. Hybrid Orbitals and Molecular Shape
11. Ionic Size (Radius)
12. Ionic Bond Formation
13. Ionization Energies
14. Lewis Dot Structure
15. Lewis Dot Structure
16. Lewis Dot Structure Properties
17. Molecular Geometry
18. Nature of Sigma and Pi bonds
19. Polarity of Molecules
20. Polarity of Molecules
21. Properties of Molecules ( $\sigma$  and  $\pi$  etc.)
22. Properties of Molecules ( $\sigma$  and  $\pi$  etc.)
23.  $PV/T = PV/T$
24.  $PV=nRT$
25. Resonance
26. Resonance Structures
27. Trends in Properties of Atoms
28. Use of  $PV=nRT$  in Stoichiometry