PHYS 321 Questions/Problems for Chap-2 Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.1 Cite the difference between atomic mass and atomic weight.

2.4 (a) Cite two important quantum-mechanical concepts associated with the Bohr model of the atom.

(b) Cite two important additional refinements that resulted from the wave-mechanical atomic model.

2.7 Give the electron configurations for the following ions: Fe2+, Al3+, Cu+, Ba2+, Br-, and O2-.

2.8 Sodium chloride (NaCl) exhibits predominantly ionic bonding. The Na+ and Cl- ions have electron structures that are identical to which two inert gases?

2.19 Compute the percent ionic character of the inter-atomic bonds for the following compounds: TiO2, ZnTe, CsCl, InSb, and MgCl2. The electronegativity values are given below.

