Chemistry 115 Name

Dr. Cary Willard

Quiz 7A (20 points) March 31 2009

1. (2 points) How many protons are in the nucleus or a technetium (Tc) atom.
2. (3 points) What is the major difference between an orbital and a Bohr orbit?
3. (3 points) Show the orbital diagram for an atom of oxygen.

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1s 2s 2p

1. (3 points) Write the complete electron configuration for an atom of phosphourus.
2. (3 points) Write the shorthand electronic configuration (as predicted by the periodic table) for an atom of cobalt.
3. (3 points) How many valence electrons does an atom of silicon have?
4. (3 points) What do the electron structures of the alkali metals have in common?

Chemistry 115 Name

Dr. Cary Willard

Quiz 7B (20 points) March 31, 2009

1. (2 points) How many protons are in the nucleus or a halfnium (Hf) atom.
2. (3 points) What is the major difference between an orbital and a Bohr orbit?
3. (3 points) Show the orbital diagram for an atom of nitrogen.

* ⬜ ⬜ ⬜ ⬜

1s 2s 2p

1. (3 points) Write the complete electron configuration for an atom of magnesium.
2. (3 points) Write the shorthand electronic configuration (as predicted by the periodic table) for an atom of nickel.
3. (3 points) How many valence electrons does an atom of aluminum have?
4. (3 points) What do the electron structures of the alkali metals have in common?