**Practice Problems on Quantum #s and Electron Configurations**

PSC 100

1. Which type of electron is impossible?

a. 5p b. 1s c. 2d d. 4f

2. Which type of electron has the highest energy?

a. 4p b. 5p c.5s d. 4d

3. Which element has the same number of valence electrons as sulfur?

a. Se b. Si c. Sr d. Sc

4. Which element has as its electron configuration [Kr]5s24d1?

a. Ga b. In c. Y d. Sc

5. Which element has properties most like those of Vanadium?

a. Cr b. Nb c. Ti d. Zr

6. Write electron configurations for the following atoms:

a. P b. Ti c. Mg d. Ne e. As f. Pd

7. How many valence electrons on atoms of the following elements?

a. O b. Br c. Be d. F e. Al f. Mn g. Sn

Answers: 1. c 2. b 3. a 4. c 5. b

6a. 1s22s22p63s23p3 or [Ne]3s23p3 7a. 6 7b. 7