**Electron Configuration Practice**

1. (a) For n=4, what are the possible values of l? (b) For l= 2, what are the possible values of ml?
2. How many possible values for l and ml are there when (a) n = 3 (b) n = 5?
3. Give the numerical values of n and l corresponding to each of the following designations (a) 3p

(b) 2s

(c) 4f

(d) 5d

1. Give the values of n, l, and ml for (a) each orbital in the 2p subshell (b) each orbital in the 5d subshell.
2. Which of the following represent impossible combinations of n and l?
3. 1p
4. 4s
5. 5f
6. 2d
7. Which are permissible sets of quantum numbers?
8. n=2, l=1, ml= 1
9. n=1, l=0, ml= -1
10. n=4, l=2, ml= -2
11. n=3, l=3, ml= 0