

Name: _____

Quiz #4
CHEM 1411 — Fall 2009

1. Write a formula for the ionic compound that forms between each of the following pairs of elements, and name the resulting compound. (20 pts)

a. Mg and S _____

b. Na and O _____

c. Ca and sulfate _____

2. Name each of the following compounds: (30 pts)

a. KI _____

b. $\text{Fe}(\text{NO}_3)_2$ _____

c. PBr_3 _____

3. Write a formula for each of the following compounds: (30 pts)

a. iron(III) sulfide _____

b. calcium carbonate _____

c. dinitrogen trioxide _____

4. Calculate the mass percent of each of the elements in the compound N_2O . (10 pts)

(a) 63.65% N 36.35% O

_____ (b) 46.68% N 53.32% O

(c) 30.45% N 69.55% O

(d) 56.77% N 43.23% O

5. How many moles of oxygen atoms are in 4.88 mol of H_2O_2 ? (10 pts)

(a) 1.22 mol O

_____ (b) 2.44 mol O

(c) 9.76 mol O

(d) 14.6 mol O