## Blitz, Units 24-25, Form D-H

Name \_\_\_\_\_ Period \_\_\_\_

*This is a Take Home Exam.* You may use your Notes, PowerPoint, or Text on this exam but NO help from human beings!

## You MUST HAND WRITE THIS EXAM!! NO TYPED PAPERS WILL BE ACCEPTED!

## **EXPLAIN IN COMPLETE SENTENCES AND GIVE EXAMPLES:**

\*\*\* SHOW METHOD OF SOLUTION FOR ALL PROBLEMS !

- 1. Determine if a precipitate will form when  $[Ba^{+2}]$  is 1 X 10<sup>-6</sup> M and  $[SO_4^{-2}]$  is 1 X 10<sup>-8</sup> M.  $K_{sp}$  for  $BaSO_4$  is 1 X 10<sup>-10</sup>.
- 2. Find the [HBr] in M when 50ml of it are neutralized by 80ml of 2.0 M NaOH.
- 3. Find the pH when
  - a)  $[H^{+1}] = 1 \times 10^{-3} M$  and when
  - b)  $[OH^{-1}] = 1 \times 10^{-4} M.$   $K_w = 1 \times 10^{-14}.$
- 4. List three Bases and three Acids and name them.
- 5. Explain  $K_w$  and the pH scale.
- 6. DEFINE: Corrosive, Caustic, Alkaline, Salt, and Titration.
- 7. Write ionic equations for
  - a. the precipitation of PbI<sub>2</sub>
  - b. for the dissolving of  $Hg_2SO_{4(s)}$
- 8. Describe the Litmus test and give two examples.
- 9. Give three definitions for acids.

10. Write the K expression for the reaction for the burning of methane,  $CH_4$ . (Burn it means add  $O_2$  and get  $CO_2$  and  $H_2O$ ).

## When finished, please STAPLE this exam onto your papers and turn in on due date.