Blitz, Units 24-25, Form M-R

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:

1. 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).

2. Explain Titration and the End Point and give an example.

3. What is the Hydronium Ion and show how it is formed.

4. Write the neutralization reaction for the reaction of sulfuric acid + aluminum hydroxide.

5. List <u>three</u> properties of Acids and <u>three</u> properties of Bases.

6. Write the ionic equation for the

    a. precipitation of aluminum sulfate

    b. dissolving of magnesium hydroxide.

7. Discuss K_w and how it makes the pH scale.

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

8. Determine if a precipitate will form when $[Ag^{+1}]$ is 1×10^{-3} M and $[Br^{-1}]$ is $1 \times 10^{-8}]$ M. K_{sp} for AgBr is 8×10^{-13}.

9. Find [NaOH] in M when 40ml of it just neutralizes 68ml of 3.0 M HCL.

10. Find the pH of a solution where $[OH^{-1}]$ is 1×10^{-5} M. $K_w = 1 \times 10^{-14}$.

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