

## Blitz, Units 18-23, Form A-C

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. Find [KBr] in moles/liter when 15.2 g are dissolved in 5.19 liters of solution.
2. Discuss the entropy of **solids** and of **gases** dissolving in liquids and give examples.
3. Explain how the ammonia fountain works. Include the facts of entropy.
4. Write the net ionic equation for the dissolving of  $\text{Al}_2(\text{SO}_4)_3$  in water.
5. Correct 20.3 liters of  $\text{CO}_2$  at  $14.0^\circ\text{C}$  and 98.2 KPa to STP. (Watch your temperature units!)
6. State Boyle's Law and give an example of it.
7. Explain Spontaneous Combustion. (Ooooooh).
8. Write and balance the equation for the burning of  $\text{C}_2\text{H}_6$  and write the Big K expression for it.
9. Discuss THREE factors determining the rate of a chemical reaction.
10. Using the formula,  $PV = nRT$ , Find the volume in L when 0.362 moles of  $\text{NH}_3$  are at 120. KPa and  $8.00^\circ\text{C}$ .  $R = 8.31 \text{ L}\cdot\text{KPa}/\text{mol}\cdot^\circ\text{K}$

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