

CHM 120

Exam 2: Chapters 5,6,7,8

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Total Points: 60

PART 1: Multiple Choice questions: Q 1-24. (2 point each)

- Chemical reactions (equations) show the following
 - Reactants
 - Products
 - Physical state of each (gas or liquid or solid)
 - All of the above
- The following is true for a mole
 - It is also known as Avagadro's number
 - It contains 6.022×10^{23} molecules
 - It contains mass equivalent to molecular weight
 - All of the above are true
- In balancing chemical equations, the coefficients are used to
 - Show number of moles
 - Show volume of each in liters
 - Show amount of each in grams
 - Show temperature at which the substance is stable
- $2\text{H}_2 + \text{O}_2 \longrightarrow 2\text{H}_2\text{O}$ means that
 - 2 grams of H_2 g and 1 gram of O_2 gas combine to form 2 grams of water.
 - 2 moles of H_2 g and 1 mole of O_2 gas combine to form 2 moles of water.
 - 2 grams of H_2 g and 1 gram of O_2 gas combine to form 2 moles of water.
 - 2 molecules of H_2 g and 1 molecule of O_2 gas combine to form 2 molecules of water.
- $2\text{H}_2 + \text{O}_2 \longrightarrow 2\text{H}_2\text{O}$. In this equation, correct method to calculate molecular mass of water is
 - $2[2(\text{mass of hydrogen}) + \text{mass of oxygen}]$
 - $2(\text{mass of hydrogen gas}) + \text{mass of oxygen}$
 - $2(\text{mass of hydrogen}) + \text{mass of oxygen}$