

1. Define acid; give an example of a strong acid and a weak acid
2. Define base; give an example of a strong base and a weak base
3. Define pH mathematically. Give the biological scale and how pH affects enzymes.
4. Define buffer by the chemical constituents (composition) and give two (2) examples
5. Write out the Bohr (CO₂) equation: _____
6. Explain how the respiratory system controls acid/base balance: _____
7. Name a cause for the following conditions
 - a. Respiratory acidosis: _____
 - b. Respiratory alkalosis: _____
8. Explain how the kidneys control acid/base balance using these processes:
 - a. Filtration
 - b. Reabsorption
 - c. Secretion
9. Name two (2) cause each for the following conditions
 - a. Metabolic Acidosis: _____
 - b. Metabolic Alkalosis: _____
10. Name the two major fluid compartments and the primary cation and primary anion for each area.
11. Name any/all the hormones that control the following
 - a) Sodium: _____
 - b) Calcium: _____
 - c) Water: _____
 - d) Potassium: _____
 - e) Magnesium: _____
 - f) Blood Pressure: _____
12. Write out the Henderson-Hasselbach Equation:
13. Name the major fluid compartments, their electrolyte composition, and properly define osmosis.