Chapter 2: Multiple Choice Practice Test

1. Which statement is **CORRECT** regarding ions?

a. If an electron is lost the ion is called an anion

b. Anions and cations can form covalent bonds

c. They dissolve readily in water

d. Carbohydrates are considered ions

2. TRUE or FALSE: Covalent Bonds form when atoms share electrons equally.

3. Finish the statement: Hydrogen Bonds between covalently bonded molecules that display…

a. A positive charge only

b. Polarity

c. Neutral charges

d. None of the above

4. Which of the following is **true** about a water molecule, H20 ?

a. The hydrogen atoms are bonded to the oxygen atom covalently.

b. The total number of protons in the molecule is not equal to the amount of electrons.

c. A water molecule is considered a carbohydrate.

d. The molecule is polar

5. Large group of sugars and starches are called:

a. Proteins

b. Lipids

c. Carbohydrates

d. None of the above

6. Which statement about carbohydrates is correct?

a. All carbohydrates dissolve readily in water

b. A single sugar is called a dissacharide, ex glucose

c. Polysaccharides are many sugars bonded together

d. Glycogen is considered a dissacharide

7. True or False: Lipids are used for energy storage and are Hydrophilic compounds (water loving).

a. True

b. False

8. Biological membranes are made up of:

a. Steroids

b. Phospholipids

c. Tri-acylglycerides

d. None of the above

9. All 20 amino acids contain the basic structure of:

a. Glycerol and fatty acids

b. Amino group, Carboxyl group, and an R-group attached to an alpha carbon

c. Nitrogenous base, deoxy ribose and phosphate

d. All of the above

10. Each nucleotide in DNA contains which three parts?

a. Amino group, carboxyl group and alpha carbon

b. Nucleoside base, Pentose sugar, and a phosphate

c. A monosaccharide, a phosphate and lipid

d. A lipid, an amino group and sugar

11. The nucleotides Adenine and Thymine are bound by how many hydrogen bonds?

a. 1

b. 2

c. 3

d. None

12. True or False: DNA is a single helix with a sugar-phosphate backbone?

a. True

b. False

13. True or False: Adenine pairs with Cytosine and Thymine with Uracil.

a. True

b. False