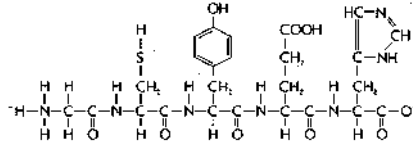


AP BIO Clicker Review #2 - Chapter 2-5

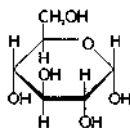
- Hydrolysis is involved in which of the following?
 - formation of starch
 - hydrogen bond formation between nucleic acids
 - peptide bond formation of proteins
 - the hydrophilic interactions of lipids
 - the digestion of maltose to glucose
- The major class of biological molecules that are NOT polymers is
 - proteins
 - lipids
 - nucleic acids
 - polysaccharides
- Which of the following is an example of a hydrogen bond?
 - bond between two hydrogen atoms
 - bond between Na and Cl in salt
 - attraction between the H of one water molecule and the O of another water molecule
 - a peptide bond
 - a glycosidic bond
- Alpha helices and beta pleated sheets are found in which level of protein structure?
 - primary
 - secondary
 - tertiary
 - quaternary
 - none of these; nucleic acids form these not proteins

- This molecule is a
 - polysaccharide
 - fatty acid
 - nucleic acid
 - polypeptide
 - triacylglycerol



- Hydrophilic properties are characteristic of all of the following EXCEPT
 - polar molecules
 - long hydrocarbon chain components in some molecules
 - molecules that readily ionize in water
 - the hydroxyl group
 - molecules soluble in water
- All of the following are associated with the travel of water from the roots up through the vascular system in plants EXCEPT
 - adhesion
 - cohesion
 - transcription
 - transpiration
 - hydrogen bonding

- All of the following could be built with this subunit EXCEPT?
 - glycogen
 - cellulose
 - starch
 - amylose
 - amylopectin



9. Which of the following is not considered to be an emergent property of water?

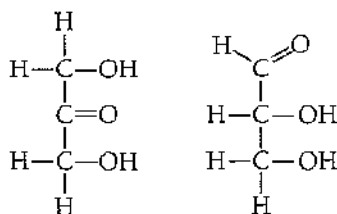
- A cohesion
- B insulation of bodies of water by floating ice
- C moderation of temperature
- D transpiration
- E versatile solvent

10. Which TWO functional groups is always found in amino acids?

- A amino and carboxyl
- B amino and sulfhydryl
- C carbonyl and carboxyl
- D alcohol and aldehyde
- E ketone and amino

11. Choose the term that correctly describes the relationship between these two sugar molecules.

- A structural isomers
- B geometric isomers
- C enantiomers
- D isotopes



12. Which functional group is most likely responsible for an organic molecule behaving as a base?

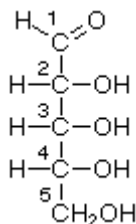
- A hydroxyl
- B carbonyl
- C phosphate
- D carboxyl
- E amino

13. Which of the following is made from subunits containing a sugar, nitrogen base, and a phosphate group?

- A nucleic acid
- B polysaccharide
- C polypeptide
- D fatty acid
- E phospholipid

14. How many asymmetric carbons are in ribose sugar?

- A 0
- B 1
- C 2
- D 3
- E 4



15. The enzyme amylase can break glycosidic linkages between glucose monomers only if the monomers are in the alpha form. Amylase can break down all of the following EXCEPT?

- A amylopectin
- B starch
- C glycogen
- D cellulose
- E amylose

Answer Key : AP BIO Chemistry of Life 2-5 #2

Question:

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Answer

- E
- B
- C
- B
- D
- B
- C
- B
- D
- A
- A
- E
- A
- D
- D