

Q.1 What is an example of a 5-carbon sugar?

- a). Ribose
- b). Fructose
- c). Glucose
- d). Sucrose

The correct answer is Ribose:

Glucose and fructose are both 6-carbon sugars, while sucrose is glucose and fructose bonded together. Ribose is the sugar in RNA.

Q.2 Of what elements are carbohydrates composed?

- a). C, H, & O
- b). C, H & N
- c). C, H, O & N
- d). C, H, O & S

The correct answer is C, H, & O:

Carbohydrates are composed of carbon, hydrogen, and oxygen atoms. Proteins are composed primarily of carbon, hydrogen, oxygen, as well as nitrogen.

Q.3 What is a long chain of sugar molecules?

- a). Lipid
- b). Polypeptide
- c). Polysaccharide
- d). Protein

The correct answer is Polysaccharide:

Polysaccharides are long chains of simple sugars bonded together including starch, glycogen and cellulose. Polypeptides and proteins are long chains of amino acids. Lipids are substances like fats.

Q.4 What is the principal carbohydrate storage product in animals?

- a). Cellulose
- b). Glycogen
- c). Starch
- d). Protein

The correct answer is Glycogen:

Glycogen is stored in the liver and muscles. Cellulose is common in plants as supporting material. Starch is a carbohydrate storage product in plants. Proteins are not carbohydrates.

Q.5 What molecules are the building blocks of proteins?

- a). Amino acids
- b). Fatty acids
- c). Sugars
- d). Disaccharides

The correct answer is Amino acids:

Proteins are formed with amino acids bonded together. Sugars and disaccharides are carbohydrates. Fatty acids are lipids.

Q.6 What is the name for 2 amino acids bonded together?

- a). Alanine
- b). Di-saccharide
- c). Di-peptide
- d). Protein

The correct answer is Dipeptide:

A dipeptide is two amino acids bonded together while a disaccharide is two sugars bonded together. Proteins are long chains of amino acids, and alanine is a simple amino acid.

Q.7 What is the protein found in human hair and finger nails, as well as in hooves, horns, wool, claws, bird beaks, and spider webs?

- a). Keratin
- b). Cellulite
- c). Collagen
- d). Glycogen

The correct answer is Keratin:

Keratin is also found in bird and reptile scales. Collagen is found in skin, tendons, and ligaments. Glycogen is a carbohydrate. Cellulite is "cottage-cheese" skin.

Q.8 Of what is a triglyceride composed?

- a). One glycerol with 3 fatty acids
- b). 3 glycerides
- c). 3 glycerol with a fatty acid
- d). 3 fatty acids

Q.9 Why is a saturated fat called a "saturated" fat?

- a). The fat is saturated with water.
- b). The fatty acid carbon chains are saturated with hydrogen.
- c). The fatty acid chains can have more water added.
- d). They saturate the body with fat when eaten.

The correct answer is: The fatty acid carbon chains are saturated with hydrogen.

Each carbon in the fatty acid chain is bonded to the maximum number of hydrogen atoms, and is said to be saturated with hydrogen. Unsaturated fatty acids have carbon-carbon double bonds which can be broken to add more hydrogen.

Q.10 Of what elements are triglycerides composed?

- a). C, H, O & N
- b). C, H & O
- c). C, H & N
- d). C, H, O, N & S

The correct answer is C, H & O:

Carbohydrates and the lipids known as triglycerides are composed of carbon, hydrogen, and

oxygen atoms. Proteins are composed primarily of carbon, hydrogen, oxygen, as well as nitrogen.