Carbohydrates

1. The products of hydrolysis of lactose are:
   - α-galactose and α-ribose
   - α-fructose and α-galactose
   - α-glucose and α-galactose
   - α-glucose and α-fructose

2. Starch is a polymer made from the following monomer:
   - α-glucose
   - β-glucose
   - α-fructose
   - α-galactose

3. Which two monosaccharides combine to form sucrose?
   - α-glucose and α-fructose
   - α-glucose and β-glucose
   - α-fructose and α-ribose
   - α-galactose and α-fructose

4. The type of reaction that occurs when a disaccharide is formed from two monosaccharides is
   - condensation
   - hydrolysis
   - addition
   - reduction

5. The type of bond that forms when a disaccharide is formed from two monosaccharides is called:
   - a peptide bond
   - a carbohydrate bond
   - an ester bond
   - a glycosidic bond

6. Aldoses are reducing sugars because in their non-cyclic form they contain:
   - an ester group
   - a ketone group
   - an hydroxyl group
   - an aldehyde group

7. Which is the most important carbohydrate fuel in human cells?
   - ribose
   - fructose
   - galactose
   - glucose

8. Saccharides contain the following combination of elements:
   - carbon and hydrogen
   - carbon, oxygen and hydrogen
   - carbon, nitrogen and hydrogen
   - carbon, hydrogen and phosphorus