

Gr 10 Chemistry of life

1. What is iodine solution used to test for? *

- ☐ Starch
- ☐ Glucose
- ☐ Protein
- ☐ Fat

2. Two examples of disaccharides are... *

- ☐ fructose and sucrose
- ☐ maltose and sucrase
- ☐ sucrose and maltose
- ☐ glucose and maltose

3. Lipid structural monomers include... *

- ☐ triglyceride and glucose
- ☐ glycerol and fatty acid
- ☐ glycerol and peptide
- ☐ fatty acid and hydrogen

4. Which of the following are functions of lipids? *

- ☐ Form part of cell membranes
- ☐ Transport vitamins
- ☐ Insulates
- ☐ All of the above

5. What term is used to describe lipids that are easily dissolved in organic solvents and fats? *

- ☐ Lipophilic
- ☐ Lipophobic
- ☐ Hydrophilic
- ☐ Hydrophobic

6. Benedict's solution is used to test for which substance and what colour change is seen? *

- ☐ Starch, brown to black
- ☐ Glucose, brown to yellow precipitate
- ☐ Glucose, blue to red/brown precipitate
- ☐ Starch, blue to pink

7. Functions of proteins include... *

- ☐ Support, co-ordination of bodily activities, movement
- ☐ Storage of amino acids, immunity, enzymes
- ☐ Growth, repair, transport of haemoglobin
- ☐ All of the above
- ☐ The first and third option only

8. The biuret test for detecting the presence of peptide bonds, uses two reagents, these are... *

- ☐ copper sulfate and potassium hydroxide
- ☐ sodium hydroxide and calcium carbonate
- ☐ copper sulfate and lead oxide
- ☐ potassium hydroxide and water

9. A deficiency in which vitamin may lead to scurvy, gum bleeds and nosebleeds? *

- ☐ Vitamin D
- ☐ Vitamin B
- ☐ Vitamin A
- ☐ Vitamin C

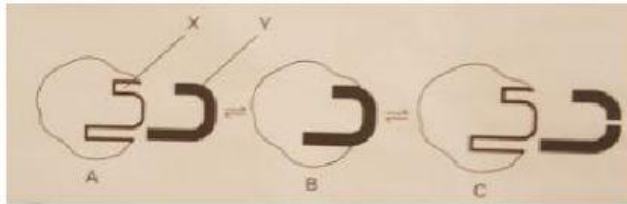
10. A nervous disorder common in countries where polished rice is the staple food. This disease results from a Thiamine deficiency. *

- ☐ Anaemia
- ☐ Scurvy
- ☐ Beriberi
- ☐ Rickets

11. Proteins are made up of... *

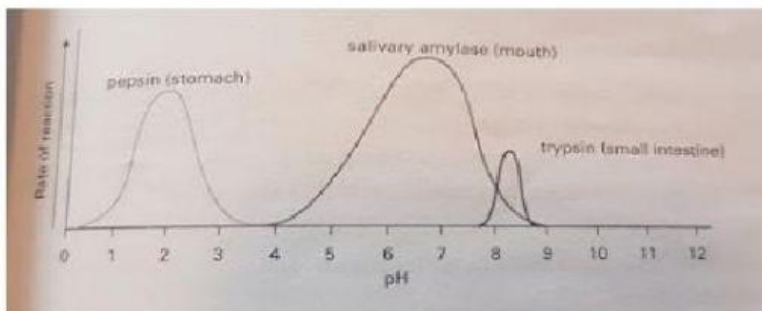
- ☐ Monosaccharides
- ☐ Amino acids
- ☐ Nucleic acids
- ☐ Nucleotides

12. The correct labels for X and Y, respectively, in the diagram below are... *



- ☐ Active site and substrate
- ☐ Substrate and product
- ☐ Active site and amino acid
- ☐ Enzyme and catalyst

13. According to the graph below, which enzyme acts optimally in an acidic environment? *



- ☐ Pepsin
- ☐ Salivary amylase
- ☐ Trypsin

14. Based on the graph in question 13, above. What is the optimal pH range for salivary amylase to react? *

- ☐ 7.8-8.8
- ☐ 5.1-6.3
- ☐ 6.5-7
- ☐ 7-7.9

15. What influences enzyme activity? *

- ☐ pH
- ☐ Temperature
- ☐ Time of day
- ☐ pH and temperature