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Class..USS..1.1.5 / 1

STUDENT NAME: ..... N°..... DATE: 10/10/21

SUPERVISED TEST N° 01

ASSESSMENT MARK :

**GENERAL INSTRUCTIONS.**

- Fill the information as required in the spaces above.
- You are required to answer ALL the questions in this paper following the section directives.

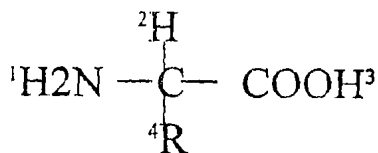
**SECTION A: MULTIPLE CHOICE QUESTIONS**

**DIRECTIVES:** Answer ALL the questions in this section. All questions carry equal marks.

Each question has FOUR suggested answers: A, B, C and D. Decide on which answer is

- correct and draw a horizontal line across the letter for the answer you have chosen.

1. A peptide bond is formed between  
A) An aldehyde group and an amino group. B) An aldehyde group and a carboxyl group  
C) An aldehyde group and an ester group D) An amino group and a carboxyl group
2. An example of a transport protein is  
~~A) Haemoglobin.~~ B) Insulin. C) Fibrinogen. D) ovalbumin
3. Which functional group acts as an acid?  
A) amino. B) carbonyl ~~C) carboxyl.~~ D) hydroxyl
4. The building blocks or basic units of triglycerides are:  
A) disaccharide. B) monosaccharide. C) amino acids ~~D) glycerol & fatty acid~~
5. Complex carbohydrates include: A) sucrose ~~B) starch~~ C) maltose D) glucose
6. All the following are features of glycogen except A) alpha-glucose residue ~~B) beta-glucose residue~~  
C) 1-4 glycosidic bonds D) 1-6 glycosidic bonds
7. Which type of bonds principally maintain the alpha-helix shape of a secondary protein structure  
~~A) disulphide bonds~~ B) ester bonds C) phosphate bonds D) hydrogen bonds
8. Which of the following reactions result in the conversion of amino acids to proteins A) deamination B) phosphorylation C) transamination ~~D) condensation.~~
9. Given the molecule below:



Which two of the groups combine to form a peptide link A) 1 and 2 B) 2 and 3 C) 2 and 4 D) 1 and 3

10. Given that R above = CH<sub>3</sub>, identify the resultant amino acid

A) alanine B) leucine C) glycine D) isoleucine.

**SECTION B: Essay type questions**

- a) Differentiate between:
  - i. Cellulose and glycogen
  - ii. DNA and RNA (8marks)
- b) Discuss with suitable examples the functions of proteins (5marks)
- c) Describe the structure of DNA (7marks)

Good luck.

End./.