

Course No: DNTS2310
Course Title: Biochemistry I
Date: 18/01/2014
No. of Questions: (9)
Time: 2hours
Using Calculator (No)

University of Palestine



Final Exam
2013/2014
Total Grade:

Instructor Name: _____
Student No.: _____
Student Name: _____
College Name: _____
Dep. / Specialist: _____
Using Dictionary (No)

Question One:

Name and draw the structure of: (10 marks)

A. a non-polar amino acid

B. a polar amino acid

C. a chargeable amino acid (acidic)

D. a chargeable amino acid (basic)

E. an amino acid that contains sulfur.

Question 2 (3 marks)

Explain why a small change in the primary structure of protein could have a big effect on its function

Question 3 (6 marks)

Compare the globular and fibrous proteins in terms of structure, function and solubility giving examples for each.

Question 4 (3 marks)

What factors can change the 3-dimensional structure of proteins?

Question 5 (3 marks)

Explain why amino acids demonstrate D and L stereoisomerism.

Question 6 (6 marks)

Construct and name the following dipeptides:

a. glutamate and Asparagine

b. tyrosine and phenylalanine

c. glycine and glycine.

Question 7 (5 marks)

What are the functions of proteins?

Question 8 (8 marks)

Discuss the four levels of protein structure identifying all types of bonding that help to stabilize it.

Question 9 (6 marks)

Define:

a. hydrolysis:

b. amide bond:

c. glycosidic linkage:

c. glycolysis:

d. enzymes:

e. cystine:

End of Questions

Good Luck