

"what the exam questions are like"

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) There are a total of \_\_\_\_\_ ketohexoses. 1) \_\_\_\_\_  
A) six                      B) four                      C) seven                      D) eight                      E) sixteen
- 2) Lactose contains \_\_\_\_\_ glycosidic bond. 2) \_\_\_\_\_  
A) an  $\alpha$ -1,4  
B) an  $\alpha$ -1,2  
C) a  $\beta$ -1,2  
D) a  $\beta$ -1,4  
E) both an  $\alpha$ -1,4 and an  $\alpha$ -1,6
- 3) What is the smallest possible distance between Bragg planes if an X-ray with a wavelength of 1.54 Å is diffracted by a protein crystal at an angle of 11.8°? 3) \_\_\_\_\_  
A) 3.77 Å                      B) 1.27 Å                      C) 4.55 Å                      D) 1.59 Å                      E) 7.54 Å

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

- 4) The amino acid proline does not have a chiral  $\alpha$ -carbon. 4) \_\_\_\_\_
- 5) The " $\alpha$ " and " $\beta$ " configurations of a monosaccharide are constantly interconverting, in equilibrium with each other. 5) \_\_\_\_\_

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

- 6) Draw the complete structure of phosphatidylcholine containing the fatty acid chains linoleic acid and lauric acid.