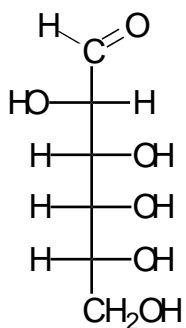


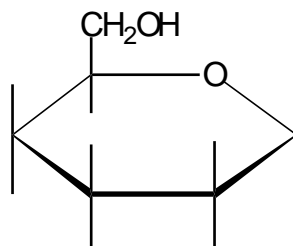
CH1020 Exam 3 Name _____

April 27, 2001 SSN _____ Seat No _____

1. For the carbohydrate whose Fischer projection is given by **A**, depict the α form of the cyclic hemiacetal by adding appropriate H or OH groups in cyclic structure **B**. (15%)



A



B

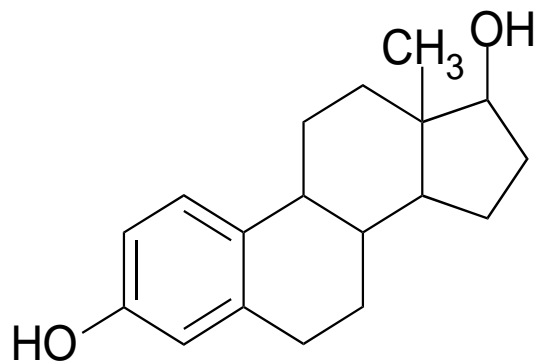
2. Cellobiose is disaccharide containing two D-glucose molecules with a $\beta(1\rightarrow4)$ glycosidic linkage. Draw cellobiose. (10%)

3. Draw a Fischer projection of an aldopentose. (10%)

4. Draw the structure a triglyceride (fat) which gives glycerol, lauric acid, palmitic acid, and oleic acid upon hydrolysis. (10%)

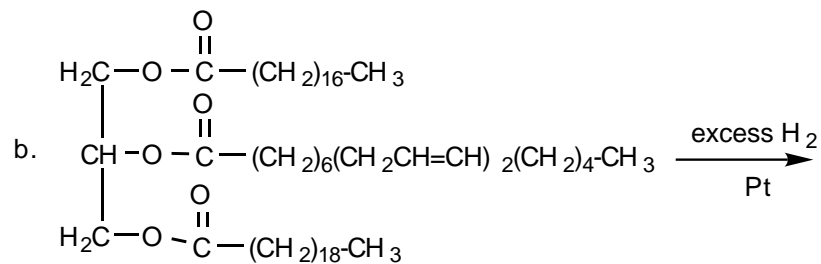
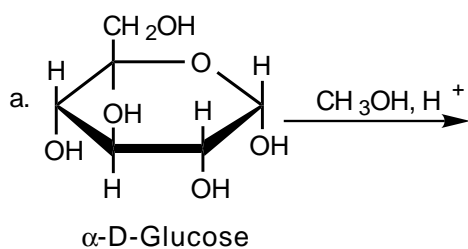
5. Draw a Fischer projection of the zwitterionic form of S-phenylalanine. (10%)

6. Circle the tetrahedral stereocenters in the steroid below. (10%)



7. Draw the structure of the tripeptide Ala-Asp-Met that would be present at physiological pH. (15%)

8. Complete the following equations. (20%)



Do not write below this line

1-3 _____ 4-6. _____

7-8. _____ Total minus _____

Name _____ Grade _____