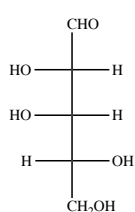
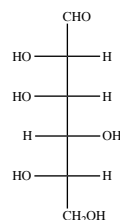


Chapter 24 Practice Problems

- Using Fischer projections, draw all the stereoisomers of naturally occurring aldopentoses.
- Using Fischer projections, draw all the stereoisomers of non-naturally occurring ketohexoses.
- Draw the resulting aldoses from subjecting each of the following to a round of Kiliani-Fischer synthesis.

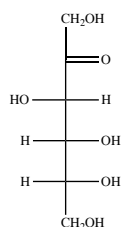


A

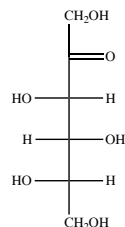


B

- The structure of D-fructose is provided below. Draw a Fischer projection for L-Fructose. What is the exact relationship between L-Fructose and D-Fructose? What is the relationship between D-Fructose and Compound A?

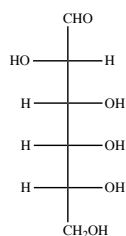


D-Fructose

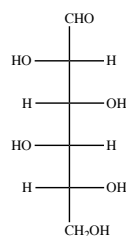


Compound A

- Draw the structure and then name the pyranose rings formed from the following sugars.



D-Altrose



D-Idose

- Draw the structure of the pyranoside rings formed from allowing the sugar in question 5 to react with ethanol in the presence of an acid catalyst. Mark the glycoside linkages.