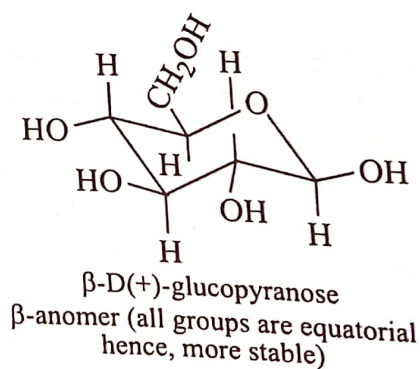
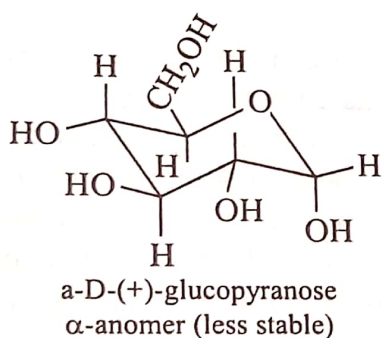


2.28 CONFORMATIONS OF SUGARS

Reeves (1950) has shown that α -D-(+)-glucopyranose and β -D-(+)-glucopyranose both have the chair conformation. In the α -D-(+)-glucopyranose the glycosidic hydroxyl is axial and in the β -anomer



it is equatorial. As we know, it is a general rule that the conformation which has the greatest number of large groups in equatorial position is the most stable conformation. Thus, the β -anomer is more stable than the α -anomer, and so it predominates in the equilibrium mixture.