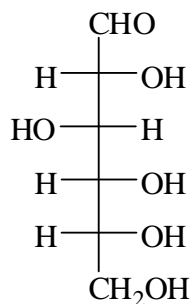
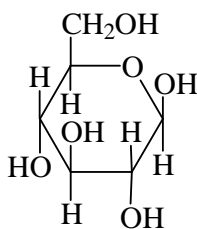


- The open chain form of D-glucose has the structure shown.

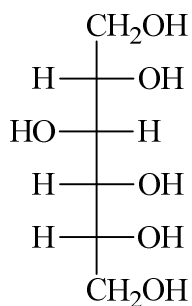


Draw the Haworth projection of  $\beta$ -D-glucopyranose.

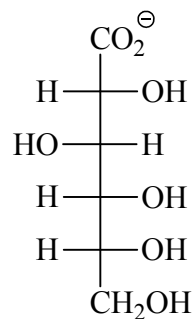


Draw the major organic product of the reaction of D-glucose with the following reagents.

1.  $\text{NaBH}_4$     2.  $\text{H}^+ / \text{H}_2\text{O}$



$[\text{Ag}(\text{NH}_3)_2]^+ / \text{OH}^-$



Would you expect D-glucose to be water soluble? Why?

**Yes - it contains a large number of alcohol groups which will form hydrogen bonds with water.**