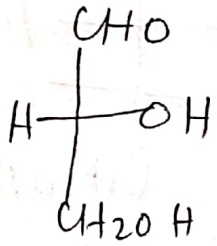
TDC-II
Paper-IV
Stereochemistry

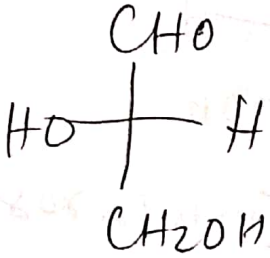
D/L - Designation

— This designation is given relative to the designation of glyceraldehyde

— It is based on the ~~the~~ assumption that last chiral carbon of carbohydrate has same configuration as glyceraldehyde in Fischer projection



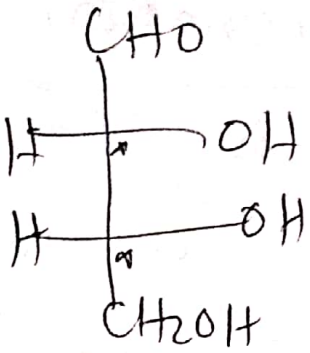
D-glyceraldehyde



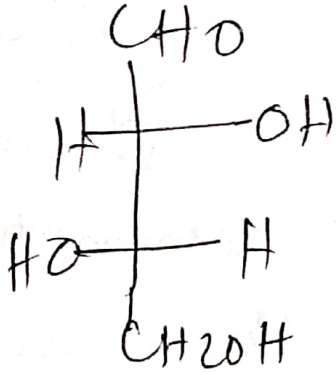
L-glyceraldehyde

D-form of carbohydrates — When OH group on the chiral carbon atom is on the right side in fischer projection it is designated as D-form

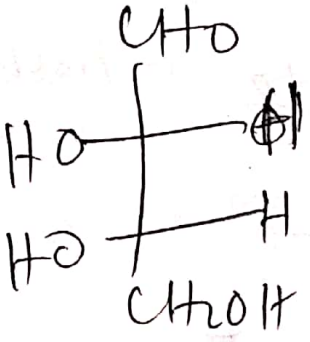
L-form — When OH group on the (last) chiral carbon atom is on the left side in fischer formula it is designated as L-form.



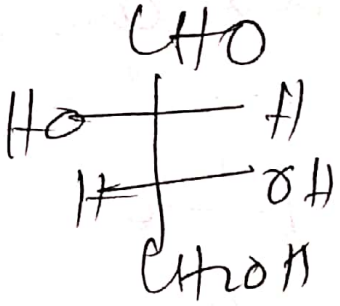
D-Erythrose



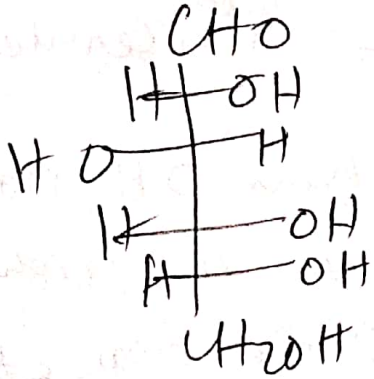
L-Threose



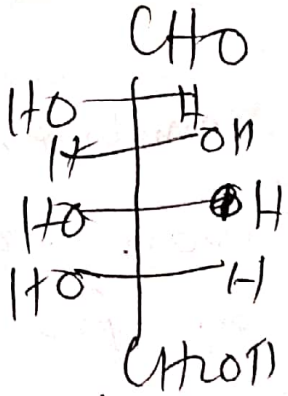
L-Erythrose



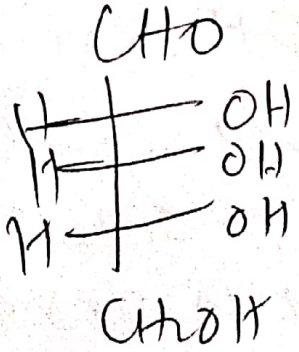
D-Threose



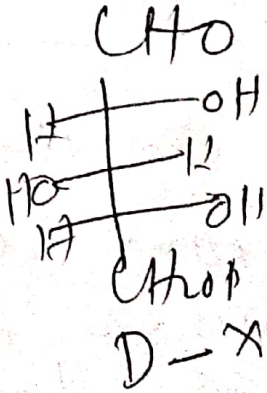
D-glucose



L-glucose



D-Ribose



D-Xylose