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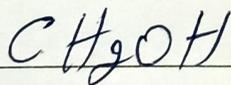
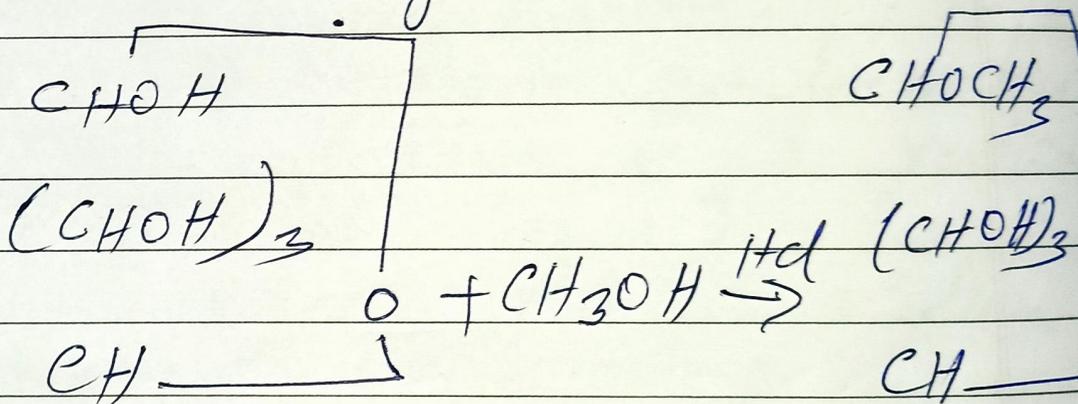
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# Glycosides

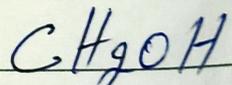
Glycosides are the compounds derived by the replacement of the hydrogen atom of the cyclic hemiacetal by an organic radical.

The formation of glycoside is comparable to the formation of acetals in which the simple hemiacetals react with another molecule of alcohol.



Aldohexopyranose  
(Lactose)

(acts as an hemiacetal)



Glycoside  
(acetal)

Glycoside is the general name those which are derived from glucose are known as glucosides, from fructose as fructosides, etc. Only the hydroxyl group derived from carbonyl group by ring formation (i.e. C<sub>1</sub> in aldoses and C<sub>2</sub> in ketoses) takes part in glycoside formation and hence this hydroxyl group is known as glycosidic hydroxyl group. The glycosidic hydroxyl group, of course, reacts with a large number of organic compounds but it should not be forgotten that a particular organic radical introduced at glycosidic hydroxyl group is acid-labile while the same organic radical at other hydroxyl group of the sugar molecule is not acid-labile, e.g. if a completely