

CARBOHYDRATES

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Lecture-10

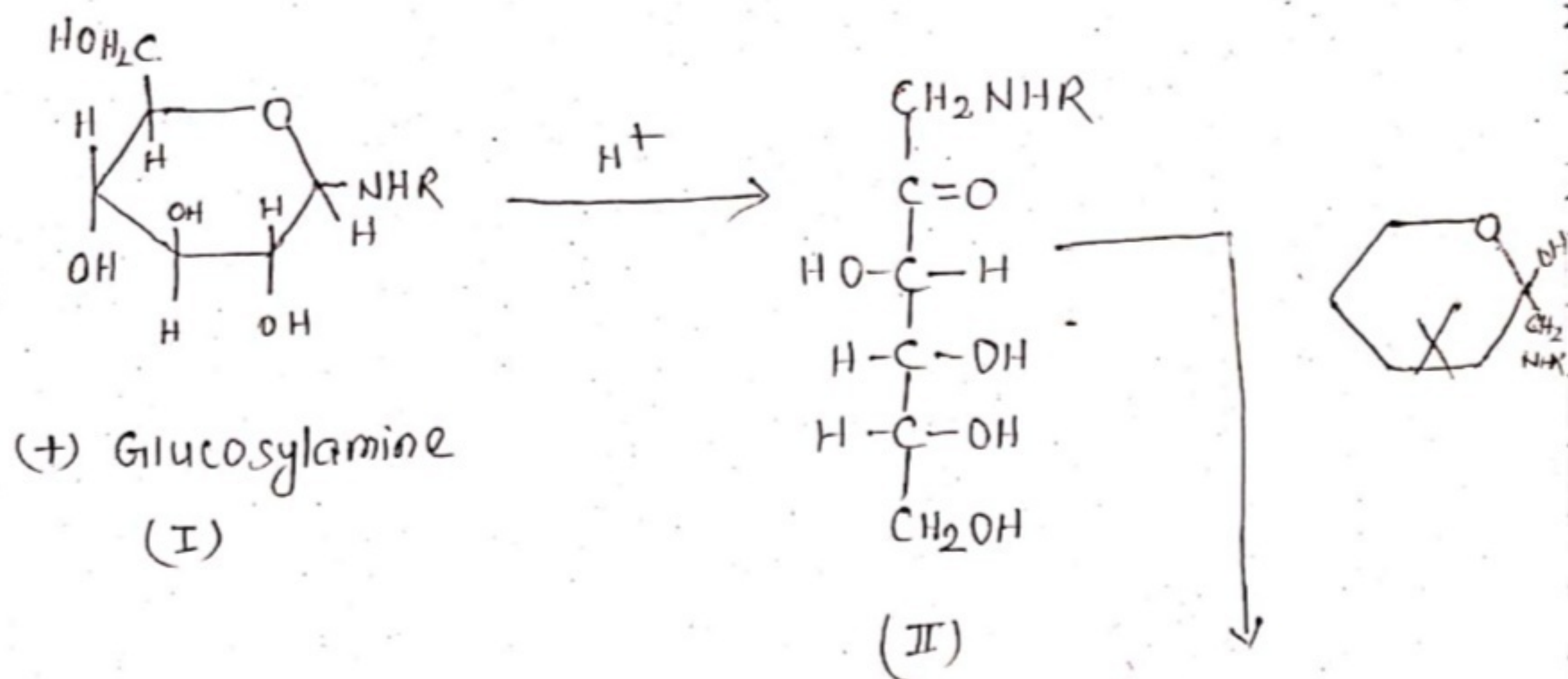
Deg-II (H) Only

P-IV, Ch-3, G-'B'

Topic - Amadori- Rearrangement And Disaccharides(Sucrose)

Amadori-Rearrangement

The Amadori rearrangement, represents a conversion of N-glycosides of aldoses to N-glycosides of the corresponding ketones by acid or base catalysis, as shown in the preparation of 1-alkylamino-1-deoxy(+)-fructose, from (+)-glucosylamine.



* Compound II & III are called Amadori compounds.

* A variety of Lewis acid such as CuCl_2 , MgCl_2 , HgBr_2 , CdCl_2 , AsCl_3 , FeCl_3 and

1-alkylamino-1-deoxy(+)-fructose

SnCl_4 have been employed as catalyst for the rearrangement of N-(+)-glucosylamines containing aromatic aglycons.

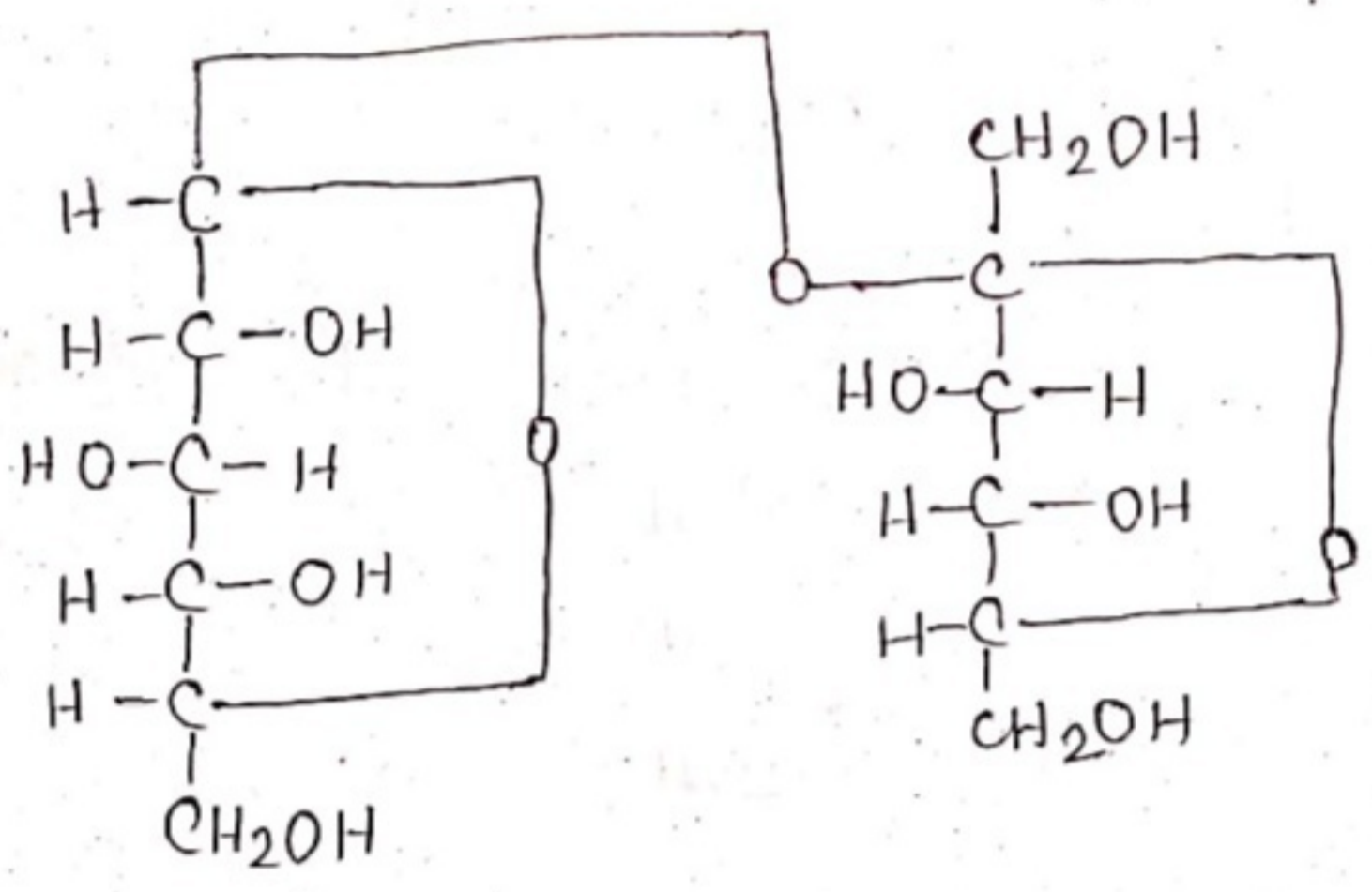
⇒ **Completed.**

DISACCHARIDES

SUCROSE

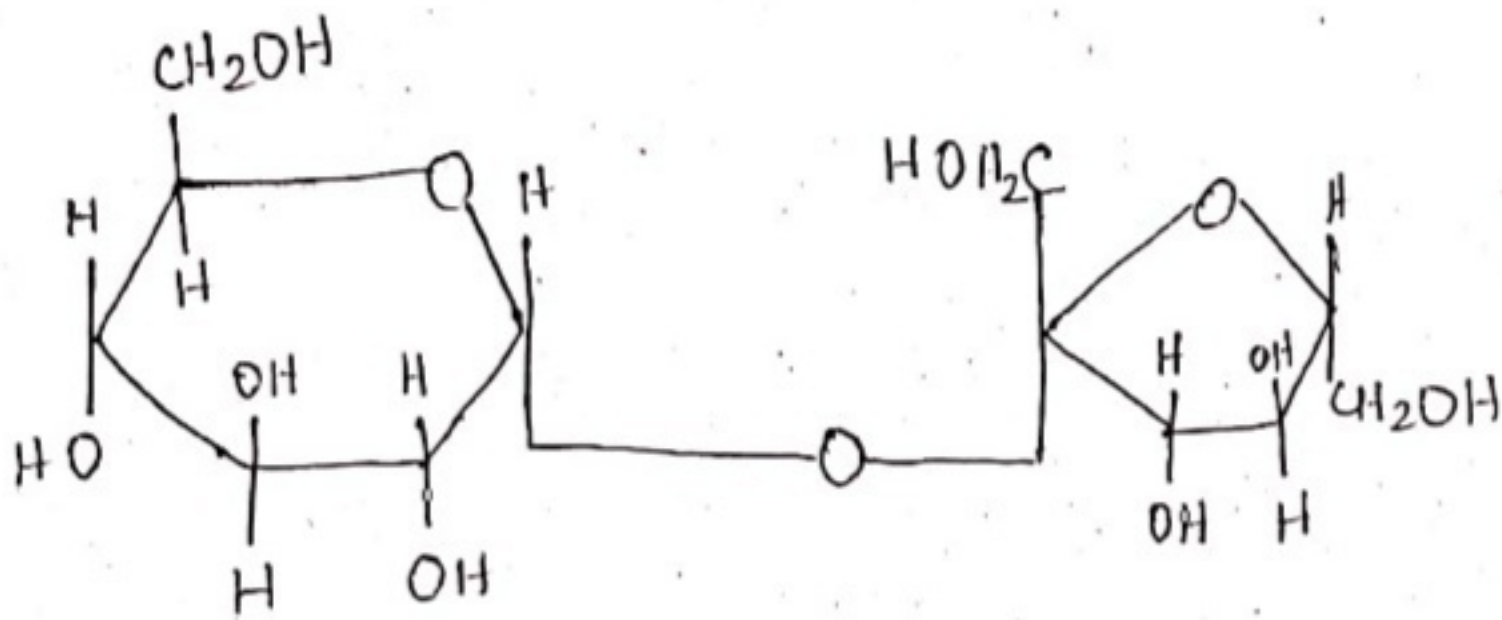
Molecular formula :- $\text{C}_{12}\text{H}_{22}\text{O}_{11}$

Fischer Structure

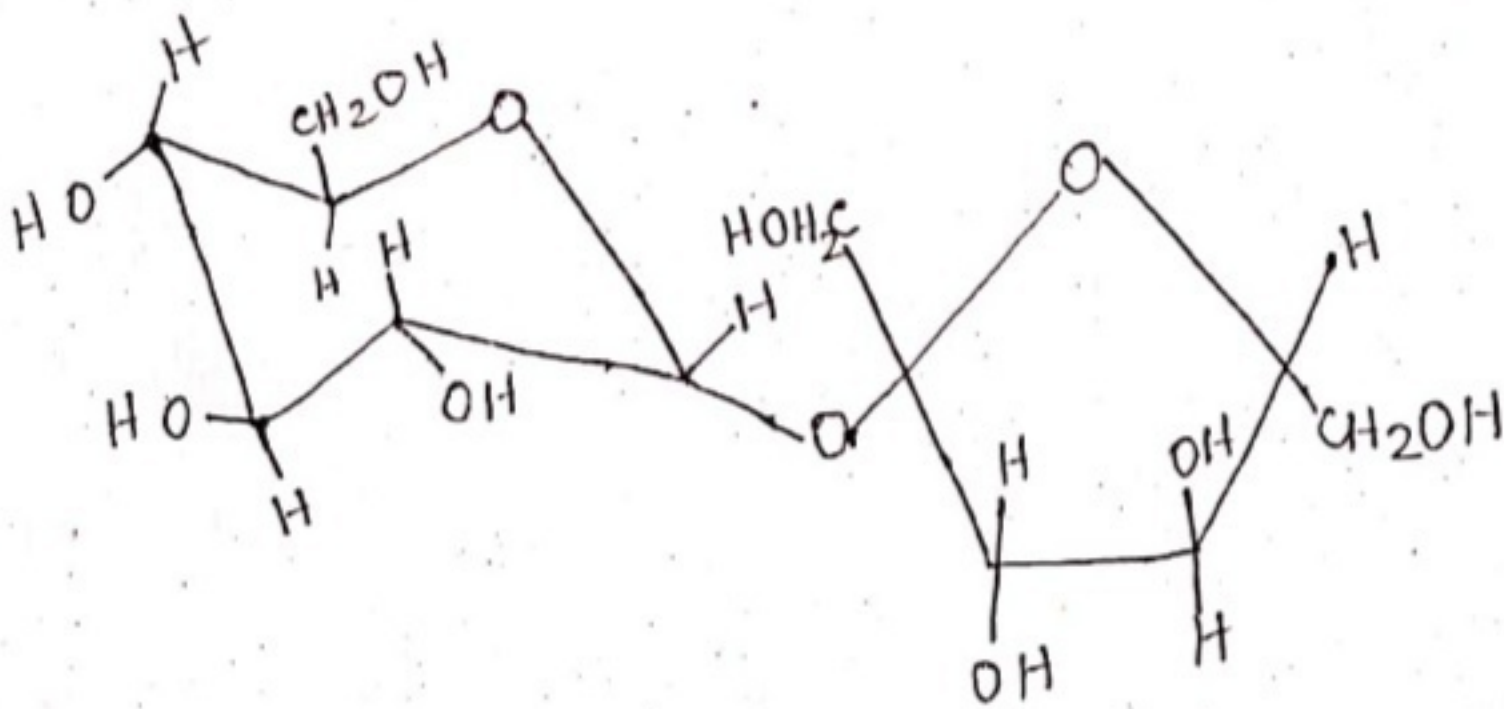


HAWORTH STRUCTURE

3.



CONFORMATIONAL STRUCTURE



**Deg-II (Hons.)
Paper-IV ,Ch-3
Carbohydrates
Completed..**

"Labour Never Goes In Vain"