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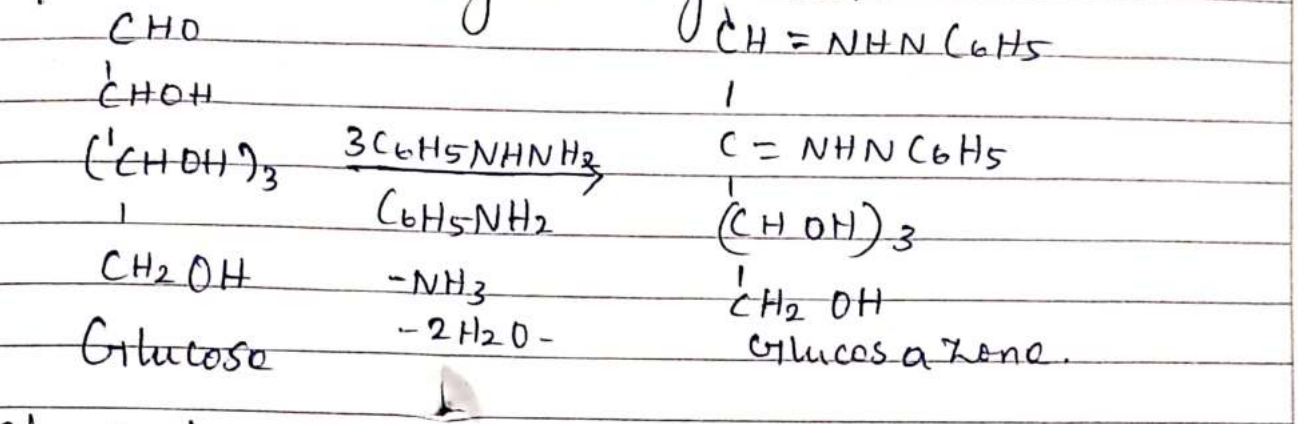
GLUCOSAZONE FROM GLUCOSE
(Cosaxone formation)

Principle :-

Glucose reacts with excess of phenyl hydrazine to gives glucosazone.



Chemical required :-

Glucose = 2 gm
Phenyl hydrazine - 4 ml
Glacial acetic acid - 4 ml.

Procedure :-

2 gm of glucose is dissolved in 15 ml of water in a boiling tube. About 4 ml of phenyl hydrazine liquid and 4 ml of glacial acetic acid are added and shaked well. The boiling tube is kept in boiling water bath for about 45 minutes with occasional Shaking. The osazone separates as yellow crystals of glucosazone are filtered at a suction pump, washed with cold water and dried.

Recrystallisation :-

About 1 gm of the Sample is recrystallised from boiling alcohol.

Note :

Instead of phenyl hydrazine, a mixture of 4 gm of phenyl hydrazine hydrochloride and 2 gm of fused Sodium acetate may also be used.

Result :-

The yield of Glucosazone Crystal = 1.543 gm.