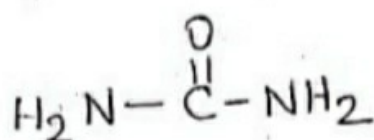


# AMINES AND UREA 1.

Deg-I(Hons.) Lecture-8 27-04-2021

## TOPIC - PREPARATION OF UREA



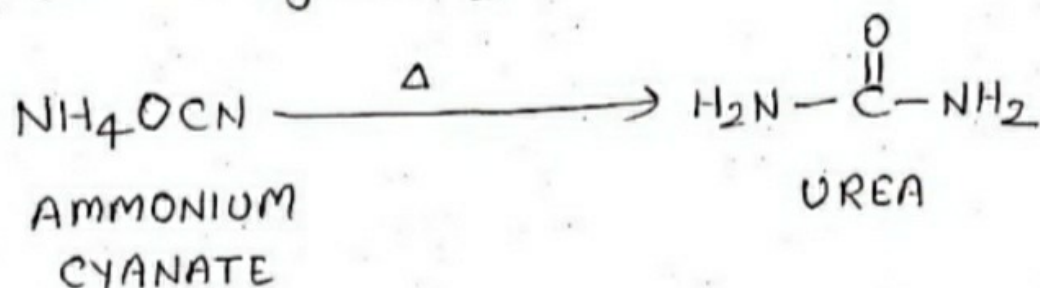
Urea

By:-Dr.Rinky  
Dept.of Chemistry

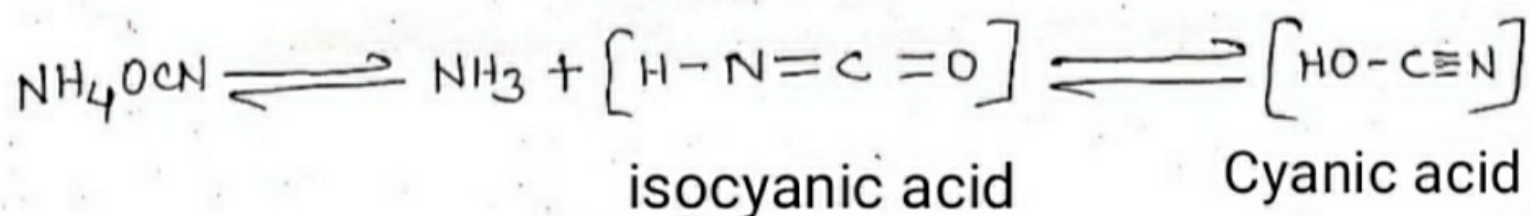
Urea is the diamide of carbonic acid.

## PREPARATION

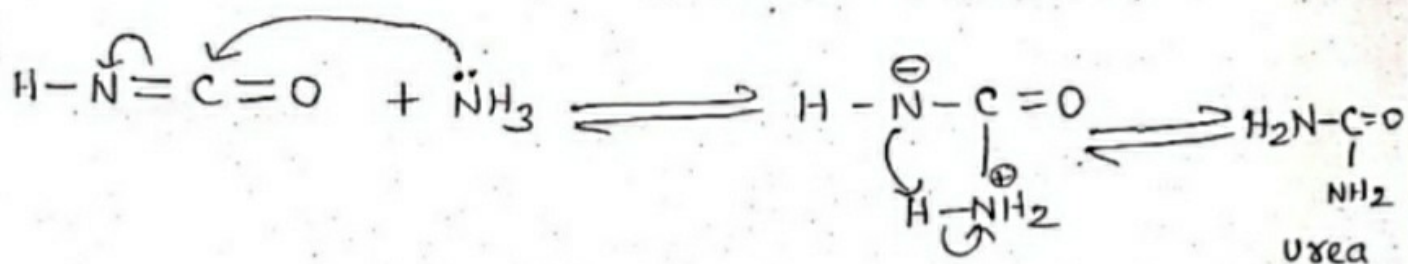
1. By heating an aqueous solution of ammonium cyanate (Wohler synthesis)



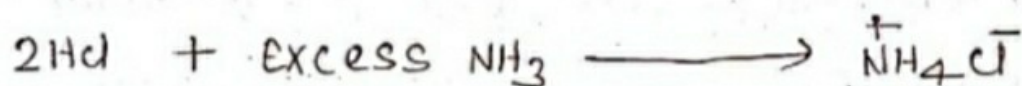
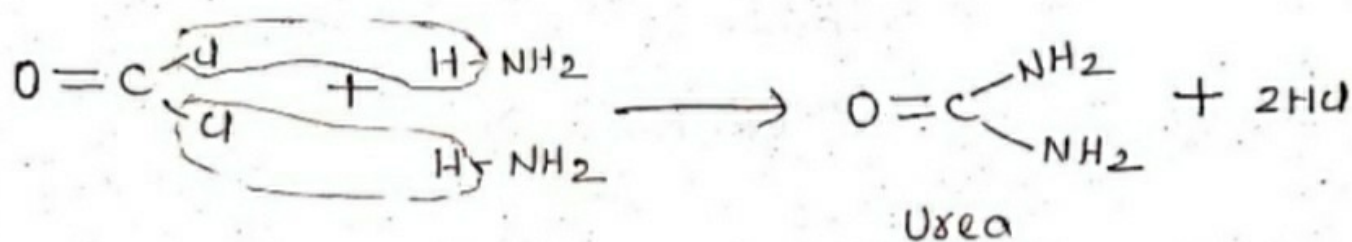
Step 1. Decomposition of ammonium cyanate gives ammonia and isocyanic acid which is tautomeric with cyanic acid.



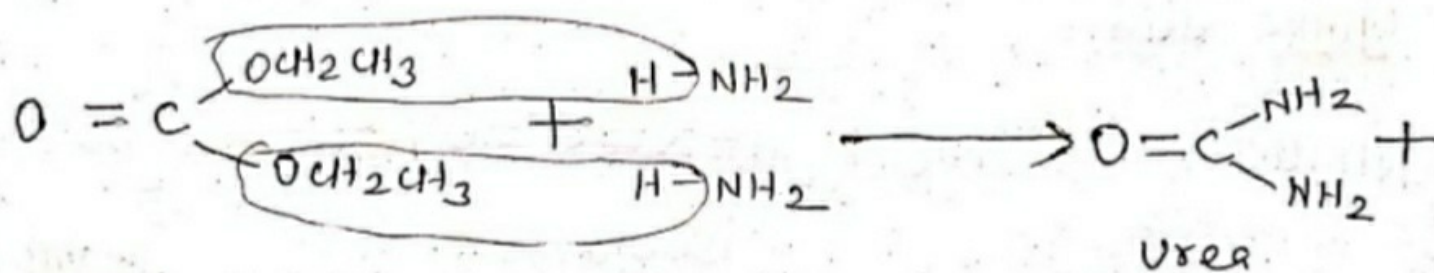
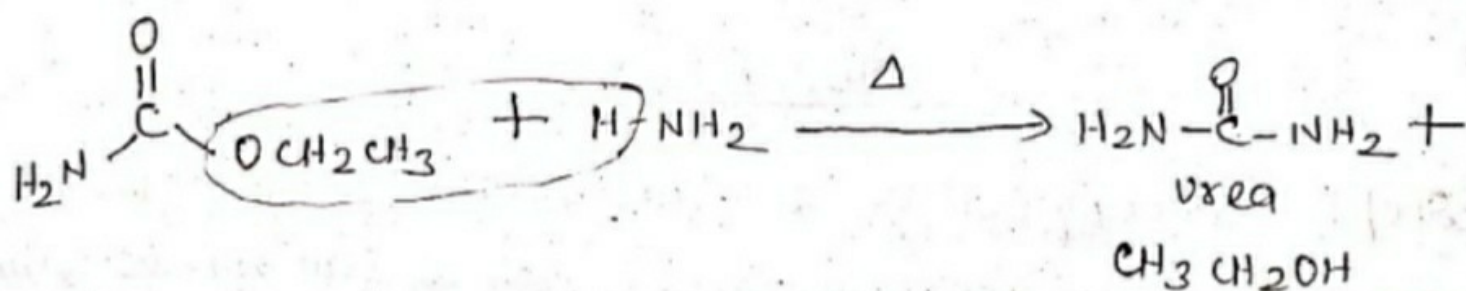
Step 2. Action of ammonia on isocyanic acid yields urea. **2.**



2. By the action of ammonia on phosgene (carbonyl chloride)



3. By the action of ammonia on urethanes and alkyl carbamates.



**Preparation Completed**