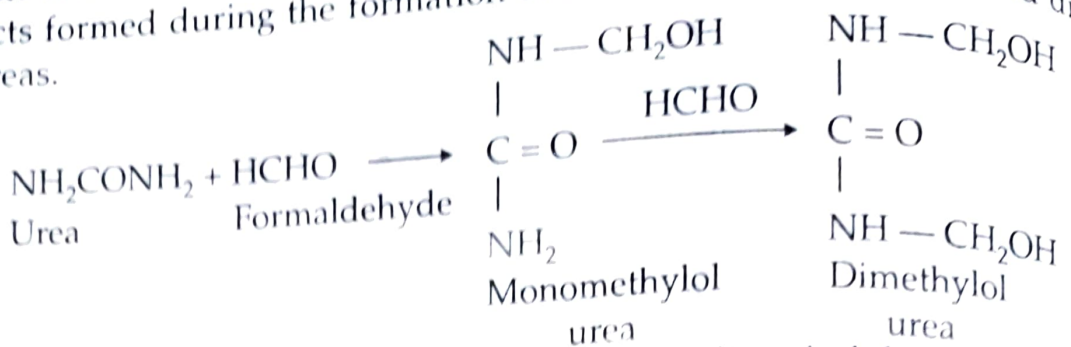
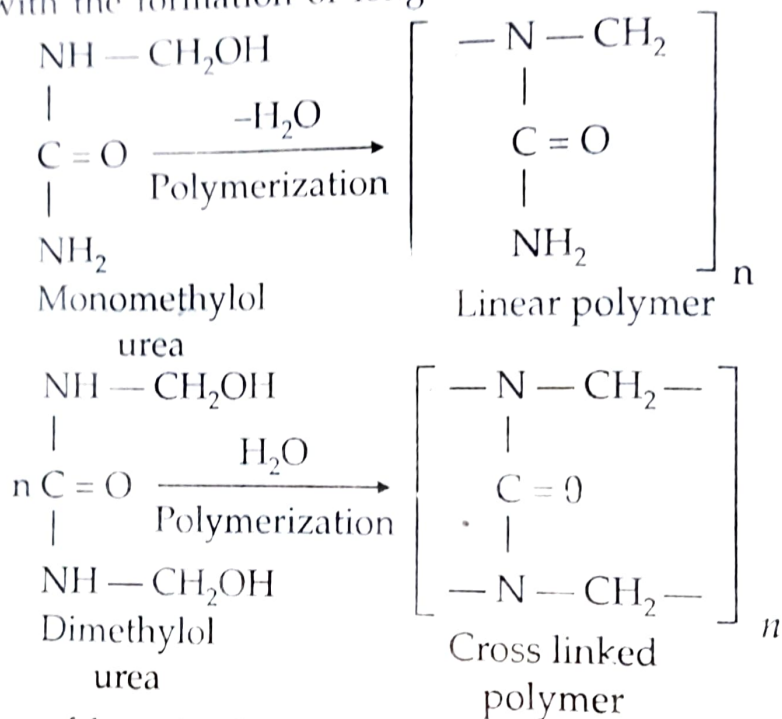


AIM Preparation of urea formaldehyde resin.

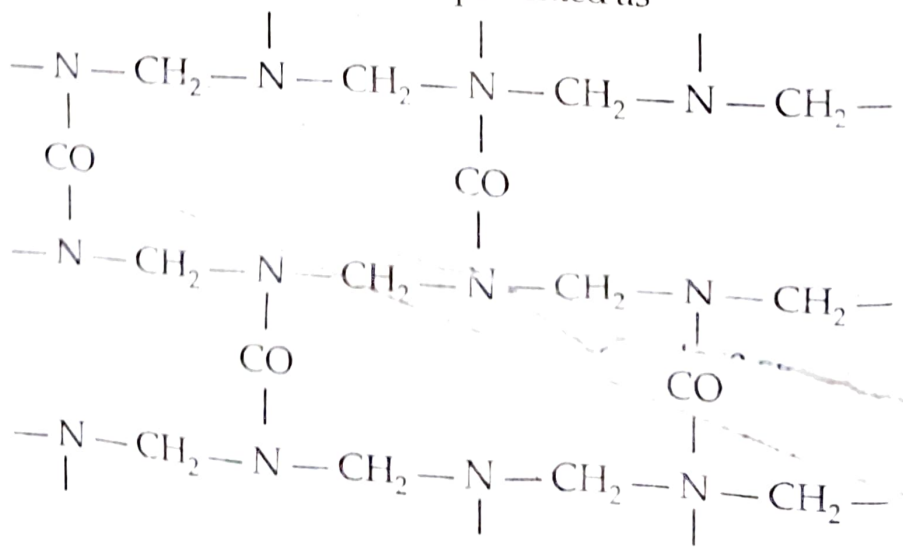
THEORY Urea formaldehyde resin is prepared by the condensation reaction between urea and formaldehyde in neutral or alkaline conditions. The products formed during the formation of resin are monomethylol and dimethylol ureas.



Polymerization can take place from mono or dimethylol urea, or possibly through both, with the formation of long chains.



Thermosetting of the resin takes place during the moulding process. For moulding the methylol derivatives are compounded with fillers, plasticizers, pigments etc. and then are subjected to heat and pressure, resulting into a hard, infusible product. A cross linked urea-formaldehyde resin can be represented as



Urea-formaldehyde resin
(Cross linked polymer)