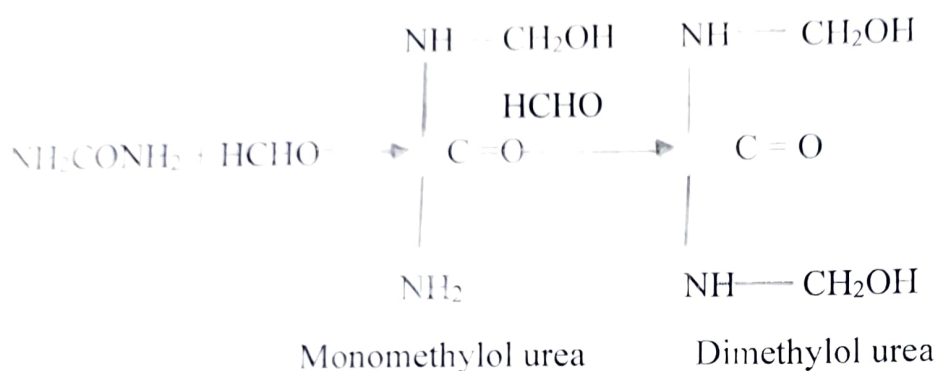


Synthesis of Polymer

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.



Requirements : Beakers, glass rod, funnel, filter paper, formaldehyde, urea, concentrated Sulphuric acid, distilled water.

Procedure :

- 1) Place about 20ml of 40% formaldehyde solution in 100ml beaker
- 2) Add about 10gm of urea with constant stirring till saturated solution is obtained
- 3) Add a few drops of conc sulphuric acid with constant stirring.
- 4) A voluminous white solid mass appears in the beaker.
- 5) Wash the white solid with water and dry it in the folds of filter paper.
- 6) Weigh the product obtained

Result : The weight of the urea formaldehyde resin is _____