

THE GURUKUL INSTITUTE

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POLYMERS, XI

- Draw the structure of monomer of each of the following polymers:
 - Polyvinylchloride (PVC)
 - Nylon-6.
- Write formulae of the monomers of polythene and Teflon.
- (a) How does vulcanization change the character of natural rubber?
(b) Why are the number 66 and 6 put in the names of nylon-66 and nylon-6.
- (a) Write the structures of monomers used and one use of the polymer Buna -N.
(b) Write the names and structures of the monomers used for getting the polymer PVC.
- What are biodegradable polymers? Give two examples.
- Write the names of monomers used for getting the polymers PVC and PMMA. State one use for each of these polymers.
- Give one example for each; differentiate between thermosetting and thermoplastic polymers.
- Differentiate between a homopolymer and a copolymer. Give one example of each.
- How Bakelite is made and what is its major use? Why is Bakelite a thermosetting polymer?
- How are polymers classified on the basis of forces between their molecules? To which of these classes does nylon-66 belong?
- Name the four categories in which polymers have been classified on the basis of magnitude of forces present in them.
- Write the equation for the synthesis of Glyptal.
- What are elastomers? Write the chemical equation to represent the preparation of Buna-S?
- Write equations used for the synthesis of (i) terylene (ii) neoprene.
- Write equations to form:
 - Nylon-6
 - Nylon-66
- Write the monomer of : a) Natural rubber b) Cellulose c) Polythene d) Teflon
- What is the step growth polymerization? Give an example of each.
- Explain with a suitable example: Chain growth polymerization.
- What is the information asked for in the following polymers:
 - Bakelite – materials used for preparation
 - PVC – monomer unit.
 - Synthetic rubber – monomer unit.
 - Nylon-66 – materials required for preparation.
- Comment on the structural difference between thermoplastics and thermosetting polymers.
- Identify the monomer in the following polymer structure:

