

Chemistry Worksheet

Grade XII Polymers

Q1. Answer the following:

- Classify the polymers-
Nylon, PVC, Buna-s, proteins, neoprene.
- How does a homopolymer differ from a copolymer?
- Give one example of a condensation polymer.
- What is the repeating structural unit in polythene polymer?
- Define the term polymerization.

Q2. Write the structure of repeating monomeric units of-

- Dacron
- Neoprene
- Polyvinyl chloride
- Teflon

Q3. Mention two important uses of each of the following:

- Bakelite
- Nylon-6
- PVC
- Nylon-6,6

Q4. What is a biodegradable polymer? Give an example of a biodegradable aliphatic polyester.

Q5. Define thermoplastic and thermosetting polymer. Give an example of each.

Q6. What is the step growth polymerization? Explain the steps involved in this process.

Q7. What is the difference between elastomers and fibers with examples?

Q8. Write the mechanism of free radical polymerization of ethene.

Q9. Write the chemical equation for the synthesis of-

- Terylene
- Teflon
- Neoprene

Q10. Write structure and uses of each-

- Addition polymer
- Urea-formaldehyde resin

Q11. Classify the following into addition and condensation polymers:

- Polythene
- PTFE
- Polybutadiene
- Bakelite