

National Institute of Open Schooling
Senior Secondary Course : Chemistry
Chapter- 31 (Soaps, Detergents and Polymers)
Worksheet-31



1. At a vegetable shop in Noida, Raj bought some vegetable. He requested the sales boy to put the vegetables in a polythene bag. The sales boy refused to do so, instead he kept the vegetable in a paper bag. After reading the above passage, answer the following questions.
 - (i) Why did the sales boy refuse to put the vegetables in a polythene bag?
 - (ii) As a student of chemistry, why would you advocate the use paper bags instead of polythene bags? Which value is promoted through the use of paper bag?
 - (iii) Suggest some activities to promote these values
2. Explain the cleaning action of soap. Why do soaps not work in hard water?
3. Explain the following terms with suitable examples :
 - (i) Cationic detergents
 - (ii) Anionic detergents
4. How do antiseptics differ from disinfectants? Give one example of each type.
5. What are the following substances? Give one example for each of them.
 - (i) Enzymes
 - (ii) Sweetening agents
6. Name the important by-products of soap industry.
7. What is the primary structural feature necessary for a molecule to make it useful in a condensation polymerization reaction?
8. Draw the structures of the monomers of the following polymers :
 - (i) Teflon
 - (ii) Polyethene
9. What is the repeating unit in the condensation polymer obtained by combining $\text{HO}_2\text{CCH}_2\text{CH}_2\text{CO}_2\text{H}$ (succinic acid) and $\text{H}_2\text{NCH}_2\text{CH}_2\text{NH}_2$ (ethylene diamine)?
10. Differentiate between molecular structures and behaviours of thermoplastic and thermosetting polymers. Give one example of each type.