

### **CHEMISTRY**

## **NCERT - NCERT CHEMISTRY(HINGLISH)**

#### **POLYMERS**

#### **Solved Examples**

- **1.** Is  $\left[CH_2-CH(C_6H_5)
  ight]_{
  m n}$  a homopolymer or
- a copolymer?



# Exercise

1. What are polymers?



Watch Video Solution

**2.** Write the names of monomers of the following polymers:



**3.** Classify the following as addition and condensation

polymers : Terylene, Bakelite, polyvinyl chloride, polythene.



**Watch Video Solution** 

**4.** What is the difference between Buna-N and Buna-S.



**5.** Arrangement the following polymers in increasing order of their intermolecular forces. Nylon  $6,\,6$  Buna-S, Polythene.



**Watch Video Solution** 

6. Explain the terms polymer and monomer.



**7.** What are natural and synthetic polymers? Give two examples of each type.



**Watch Video Solution** 

**8.** Distinguish between the terms homopolymer and copolymer and give an example of each.



9. How do you explain the functionality of a monomer?



**Watch Video Solution** 

**10.** Define the term polymersation.



**Watch Video Solution** 

**11.** Is $(NH-CHR-CO)_n$ a homopolymer or copolymer?

**12.** In which classes, the polymers are classified on the basis of molecular forces ?



**Watch Video Solution** 

**13.** How can you differentiate between addition and condensation polymerisation?



**14.** Explain the term copolymersation and give two examples.



**Watch Video Solution** 

**15.** Write the free radical mechanism for the polymersation of ethene.



**16.** Define thermoplastics and thermosetting polymers with two examples of each.



**Watch Video Solution** 

**17.** Write the monomers used for getting the following polymers.

- (i) Polyvinyl chloride
- (ii) Teflon
- (iii) Bakelite.



**18.** Write the name and structure of one of the common initiators used in free radical addition polymersations.



**Watch Video Solution** 

**19.** How does the presence of double bonds in rubber molecules influence their structure and reactivity?



**20.** Discuss the main purpose of vulcanisation of rubber.



**Watch Video Solution** 

**21.** Which are the monomeric repeating units of Nylon-6 and Nylon-6,6?



**22.** Write the names and structures of the monomers of the following polymers:

(i)Buna-S,(ii)Buna-N

(iii)Dacron,(iv)Neoprene



**Watch Video Solution** 

**23.** Identify the monomer in the following polymeric structures.

i. 
$$+C - (CH_2)_8 - C - NH - (CH_2)_6 - NH$$
  
ii.  $+N + NH - CH_2$   
NH



(i)

**Watch Video Solution** 

24. How is Dacron obtained from ethylene glycol and terephthalic acid?



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

