

Chapter: 9

Q.1 A) Choose the correct alternative and rewrite the sentence (1)

- 1) The carbon compound is used in daily life is
a. Edible oil b. Salt c. Carbon dioxide d. Baking soda

B) Answer the following questions. (2)

i) Find co-related terms

$\text{CH}_3 - \text{CH}_2 - \text{CHO}$: Propane :: $\text{CH}_3 - \text{COOH}$: _____

ii) State true or false.

Benzene is a cyclic unsaturated hydrocarbon. [QB 2021] Ans.

Q.2 A) Give scientific reason. (Any one) (2)

- 1) Carbon has large number of its compounds.
2) Ethanoic acid is named 'glacial acetic acid'.

B) Answer the following questions. (Any two) (4)

i) Distinguish between

Alkane and Alkene

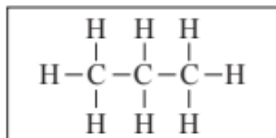
ii) Write Short Notes on

Natural macromolecules.

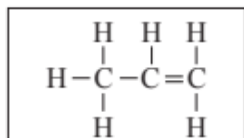
3) Esterification

Q.3 Answer the following questions. (Any two) (6)

- 1) Observe the straight chain hydrocarbons given below and answer the following questions.



(A)



(B)

- a. Which of the above straight chain compounds has saturated and unsaturated straight chains?
b. Name these straight chains.
c. Write their chemical formulae and the number of $-\text{CH}_2 -$ units.

2) Explain polymerization process to form Polymers. How is their structure known ?

3) Complete the paragraph:

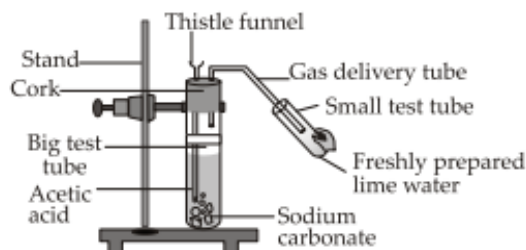
(polymerization, alkynes, polymer, macromolecule, alkene, transfer, monomer, converted)

A formed by regular repetition of a small unit is called The small unit that repeats regularly to form a polymer is called The reaction by which monomer molecules are into a polymer is called One important method of polymerization is to make a polymer by joining type monomers.

Q.4 Answer the following questions. (Any one)

(5)

- 1) Observe the diagram given below and answer the questions.



- Name the reactants in this reaction.
 - Which gas comes out as effervescence in the bigger test tube?
 - What is the colour change in the lime water?
 - In the above experiment instead of sodium carbonate which chemical can be used to get same products?
 - Write the use of acetic acid.
- 2) Identify the type of the following reaction of carbon compounds.
- $\text{CH}_3\text{-CH}_2\text{-CH}_2\text{-OH} \rightarrow \text{CH}_3\text{-CH}_2\text{-COOH}$
 - $\text{CH}_3\text{-CH}_2\text{-CH}_3 \rightarrow 3 \text{CO}_2 + 4 \text{H}_2\text{O}$
 - $\text{CH}_3\text{-CH}=\text{CH}-\text{CH}_3 + \text{Br}_2 \rightarrow \text{CH}_3\text{-CHBr}-\text{CHBr}-\text{CH}_3$
 - $\text{CH}_3\text{-CH}_3 + \text{Cl}_2 \rightarrow \text{CH}_3\text{-CH}_2\text{-Cl} + \text{HCl}$
 - $\text{CH}_3\text{-CH}_2\text{-CH}_2\text{-CH}_2\text{-OH} \rightarrow \text{CH}_3\text{-CH}_2\text{-CH}=\text{CH}_2 + \text{H}_2\text{O}$
 - $\text{CH}_3\text{-CH}_2\text{-COOH} + \text{NaOH} \rightarrow \text{CH}_3\text{-CH}_2\text{-COO-Na}^+ + \text{H}_2\text{O}$
 - $\text{CH}_3\text{-COOH} + \text{CH}_3\text{-OH} \rightarrow \text{CH}_3\text{-COO-CH}_3 + \text{H}_2\text{O}$