



Dnyansagar Coaching Classes, A'nagar

Unit Test

Std. - XII

Sub- Chemistry-II

(Halogen derivatives of Alkanes)

Time - 1 hrs

Max Marks - 20

Q.1 **Select & write the most appropriate answer from the given alternative**
For each sub question. **4**

1) Which of the following is organometallic compound?

- | | |
|------------------------------|------------------------------|
| a) CH_3COOAg | b) CH_3MgI |
| c) MgCl_2 | d) $\text{CH}_3\text{-O-Na}$ |

2) Racemate is

- | | |
|-----------------------------|----------------------------|
| a) optically active | b) optically laevorotatory |
| c) optically dextrorotatory | d) optically inactive |

3) $\text{S}_{\text{N}}1$ reaction is ----- type of

- | | |
|-----------------|-------------------------|
| a) Addition | b) Elimination reaction |
| c) substitution | d) Rearrangment |

4) The compound used as anasthatic agent

- | | |
|-----------------|-------------|
| a) chloroform | b) phosgene |
| c) chloropicrin | d) iodoform |

B) Attempt any three. **6**

1. How is ethyl chloride prepared from i) ethane ii) ethene (ethylene)
2. Describe the action of aqueous potassium hydroxide on ethyl bromide.
3. Write a note on Wurtz reaction.
4. Distinguish between electrophiles and nucleophiles.
5. Define i) Assymmetric carbon atom ii) Geminal dihalides

Q. 2 **Attempt any two.** **6**

1. What are halogen derivatives ? How they areclassified?
2. How chloroform preapered from ethyl alcohol?
3. What is action of HBr on 1-Butene in presence and absence of a peroxide?
4. Explain optical activity of lactic acid.

Q.3 **A) Attempt any one.** **4**

1. Explain, with energy profile diagram, the mechanism of alkaline hydrolysis of tertiary butyl bromide.
2. Explain, with energy profile diagram, the mechanism of $\text{S}_{\text{N}}2$ reaction

