



# Dnyansagar Coaching Classes, A'nagar

Std. - XII

MH-CET

Time - 1 hrs

Sub- Chemistry-II

*(Halogen Derivatives of Alkane)*

Max Marks - 50

- Which of the following is monohalogen derivative of alkane ?
  - $\text{CCl}_4$
  - $\text{CHCl}_3$
  - $\text{CH}_2\text{Cl}_2$
  - $\text{CH}_3\text{Cl}$
- Alkyl halides are classified on the basis of-
  - nature of halide atom
  - nature of carbon atom
  - nature of alkyl group
  - none of these.
- Alkyl halides can not exhibit .....isomerism.
  - chain
  - position
  - optical
  - functional
- Identify  $3^\circ$  halide from the following compounds -
  - neopentyl chloride
  - n-butyl chloride
  - t-butyl chloride
  - sec-propyl chloride
- The general formula of alkyl halide is ----
  - $\text{C}_n\text{H}_{n+2}\text{X}$
  - $\text{C}_n\text{H}_{2n+1}\text{X}$
  - $\text{C}_{2n}\text{H}_n\text{X}$
  - $\text{C}_n\text{H}_{2n+1}$
- Which of the following is the alkyl halide ?
  - R-I
  - R-F
  - R-Br
  - all the above
- The order of reactivity of alkyl halide is as follows ----
  - $\text{RCI} > \text{RBr} > \text{RI}$
  - $\text{RI} > \text{RBr} > \text{RCI}$
  - $\text{RBr} > \text{RI} > \text{RCI}$
  - $\text{RI} > \text{RCI} > \text{RBr}$
- The IUPAC name of compound  $\text{CH}_3\text{CH}-\text{CH}_2-\text{CH}_2\text{Cl}$  is -----
 

|  
 $\text{CH}_3$

  - 1-chloro-3-methylbutane
  - 2-methyl-4-chlorobutane
  - 2-methyl-1-chlorobutane
  - 1-chloropentane
- Preparation of alkyl halides by halogenation of alkanes is not a convenient method because the reaction is -
  - very vigorous
  - very slow
  - to be carried out in the dark
  - cannot be stopped at monohalogen stage.
- Addition of HBr to propene to give 1-bromopropane is an example of -
  - Markownikoff's rule
  - Saytzeff's rule
  - Kharasch's rule
  - None of the above
- Which of the following alkyl halides is heavier ?
  - $\text{C}_3\text{H}_7\text{Cl}$
  - $\text{C}_3\text{H}_7\text{Br}$
  - $\text{C}_3\text{H}_7\text{I}$
  - $\text{C}_3\text{H}_7\text{F}$
- Which of the following reagent reacts with alkyl halide to give side product  $\text{SO}_2$ ?
  - $\text{PCl}_3$
  - $\text{SOCl}_2$
  - $\text{PCl}_5$
  - all the above
- Which of the following alkyl halides undergoes elimination reaction readily ?
  - RI
  - R-Br
  - R-Cl
  - R-F
- What is the another name for anti Markownikoff's addition ?
  - Kharasch effect
  - Saytzeff rule
  - Peroxide effect
  - Both a and c
- How many structural isomers are possible for  $\text{C}_4\text{H}_9\text{Br}$  ?
  - 2
  - 3
  - 4
  - 5
- Methylene chloride on hydrolysis yields -
  - HCHO
  - $\text{CH}_3\text{CHO}$
  - $\text{CHCl}_3$
  - $\text{CH}_3\text{COCl}$
- Grignard's reagent when exposed to moisture -
  - gets oxidised
  - gets hydrolysed
  - gets decomposed to give hydrocarbons
  - remains unaffected
- Dichloroethylene does not show -
  - geometrical isomerism
  - optical isomerism
  - both
  - none
- Point out the isomers -
  - ethanol and ethoxy ethane

- b) methanol and methoxy methane  
c) propionic acid and ethyl acetate  
d) propionaldehyde and acetone molecule.
20. **Vinyl alcohol and acetaldehyde are -**  
a) chain isomers  
b) keto-enol isomers  
c) geometrical isomers  
d) position isomers
21. **Which of the following statement is not applicable to both ethylene dichloride and ethylidene dichloride ?**  
a) they are dihaloalkanes  
b) they react with alcoholic KOH  
c) on hydrolysis they give products which are isomers  
d) none of the above
22. **Preparation of  $\text{CHCl}_3$  from ethanol and bleaching powder involves -**  
a) hydrolysis                      b) Oxidation  
c) chlorination                    d) all of the above
23. **Always 1% of ethanol is added to the chloroform bottles because ethanol -**  
a) favours anaesthetic property of chloroform  
b) prevents reduction of chloroform  
c) separates phosgene and chloroform  
d) converts any phosgene formed to harmless compound diethyl carbonate.
24. **Purity of chloroform before being used as an anaesthetic is tested by -**  
a)  $\text{AgNO}_3$  solution  
b)  $\text{NH}_4\text{NO}_3$  solution  
c) Fehling's solution  
d)  $\text{BaSO}_4$  solution
25. **Hydrolysis of chloral with caustic soda gives-**  
a) sodium formate    b) chloral  
c) methyl alcohol    d) formic acid





# Dnyansagar Coaching Classes, A'nagar

Sub- Chemistry II

MHT-CET - UNIT TEST  
(Halogen Derivatives of Alkane)

Time - 45 min.

Max Marks - 50

- 1) b
- 2) d
- 3) d
- 4) b
- 5) d
- 6) d
- 7) b
- 8) c
- 9) d
- 10) d
- 11) d
- 12) c
- 13) d
- 14) b
- 15) b
- 16) d
- 17) b
- 18) d
- 19) a
- 20) b
- 21) d
- 22) d
- 23) c
- 24) d

- 25) c
- 26) d
- 27) b
- 28) a
- 29) a
- 30) b
- 31) d
- 32) b
- 33) a
- 34) b
- 35) b
- 36) d
- 37) b
- 38) c
- 39) d
- 40) d
- 41) a
- 42) a
- 43) d
- 44) a
- 45) a
- 46) b
- 47) a
- 48) b
- 49) b
- 50) b

DNYANSAGAR