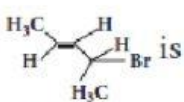


Unit 14 Haloalkanes and Haloarenes

Choose the best answer.

- The IUPAC name of  is

 - 2-Bromo pent – 3 – ene
 - 4-Bromo pent – 2 – ene
 - 2-Bromo pent – 4 – ene
 - 4-Bromo pent – 1 – ene
- Of the following compounds, which has the highest boiling point?

 - n-Butyl chloride
 - Isobutyl chloride
 - t-Butyl chloride
 - n-propyl chloride
- Arrange the following compounds in increasing order of their density

A) CCl_4	B) CHCl_3
C) CH_2Cl_2	D) CH_3Cl



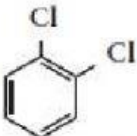
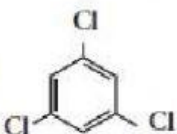
 - $\text{D} < \text{C} < \text{B} < \text{A}$
 - $\text{C} > \text{B} > \text{A} > \text{D}$
 - $\text{A} < \text{B} < \text{C} < \text{D}$
 - $\text{C} > \text{A} > \text{B} > \text{D}$
- With respect to the position of – Cl in the compound $\text{CH}_3 - \text{CH} = \text{CH} - \text{CH}_2 - \text{Cl}$, it is classified as

 - Vinyl
 - Allyl
 - Secondary
 - Aralkyl

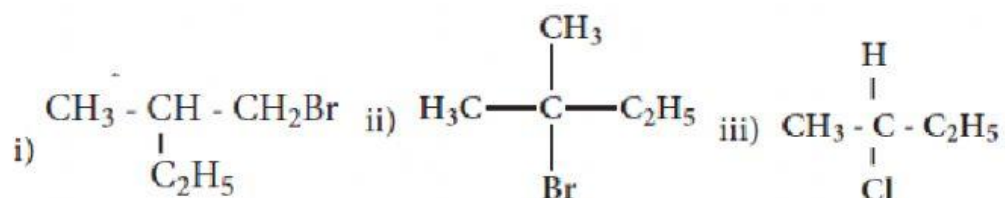
5. What should be the correct IUPAC name of diethyl chloromethane?
- 3 - Chloro pentane
 - 1-Chloropentane
 - 1-Chloro-1, 1, diethyl methane
 - 1 -Chloro-1-ethyl propane

6. C -X bond is strongest in
- Chloromethane
 - Iodomethane
 - Bromomethane
 - Fluoromethane

7. In the reaction
- $$\text{C}_6\text{H}_5\text{N}=\text{N}-\text{Cl} \xrightarrow[\text{HCl}]{\text{Cu}} \text{X} + \text{N}_2$$
- X is _____

- 
- 
- 
- 

8. Which of the following compounds will give racemic mixture on nucleophilic substitution by OH⁻ ion?



- (i)
- (ii) and (iii)
- (iii)
- (i) and (ii)

9. The treatment of ethyl formate with excess of RMgX gives

- a) $\text{R}-\overset{\text{O}}{\underset{\parallel}{\text{C}}}-\text{R}$ b) $\text{R}-\underset{\text{OH}}{\text{CH}}-\text{R}$
 c) $\text{R}-\text{CHO}$ d) $\text{R}-\text{O}-\text{R}$

10. Benzene reacts with Cl_2 in the presence of FeCl_3 and in absence of sunlight to form

- a) Chlorobenzene
 b) Benzyl chloride
 c) Benzal chloride
 d) Benzene hexachloride

11. The name of $\text{C}_2\text{F}_4\text{Cl}_2$ is _____

- a) Freon - 112
 b) Freon - 113
 c) Freon - 114
 d) Freon - 115

12. Which of the following reagent is helpful to differentiate ethylene dichloride and ethylidene chloride?

- a) Zn / methanol
 b) KOH / ethanol
 c) aqueous KOH
 d) ZnCl_2 / Con HCl

13. Match the compounds given in Column I with suitable items given in Column II

	Column I (Compound)		Column II (Uses)
A	Iodoform	1	Fire extinguisher
B	Carbon tetra chloride	2	Insecticide
C	CFC	3	Antiseptic
D	DDT	4	Refrigerants

Code

a) $A \rightarrow 2$ $B \rightarrow 4$ $C \rightarrow 1$ $D \rightarrow 3$

b) $A \rightarrow 3$ $B \rightarrow 2$ $C \rightarrow 4$ $D \rightarrow 1$

c) $A \rightarrow 1$ $B \rightarrow 2$ $C \rightarrow 3$ $D \rightarrow 4$

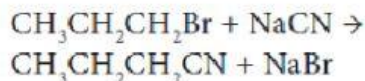
d) $A \rightarrow 3$ $B \rightarrow 1$ $C \rightarrow 4$ $D \rightarrow 2$

14. **Assertion:** In mono haloarenes, electrophilic substitution occurs at ortho and para positions.

Reason: Halogen atom is a ring deactivator

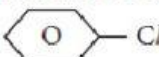



- (i) If both assertion and reason are true and reason is the correct explanation of assertion.
- (ii) If both assertion and reason are true but reason is not the correct explanation of assertion.
- (iii) If assertion is true but reason is false.
- (iv) If both assertion and reason are false.

15. Consider the reaction,



This reaction will be the fastest in

- a) ethanol b) methanol
- c) DMF (N, N' – dimethyl formamide)
- d) water
16. Freon-12 is manufactured from tetrachloro methane by
- a) Wurtz reaction
- b) Swarts reaction
- c) Haloform reaction
- d) Gattermann reaction
17. The most easily hydrolysed molecule under SN^1 condition is

- a) allyl chloride
 - b) ethyl chloride
 - c) isopropylchloride
 - d) benzyl chloride
18. The carbo cation formed in SN^1 reaction of alkyl halide in the slow step is
- a) sp^3 hybridised
 - b) sp^2 hybridised
 - c) sp hybridised
 - d) none of these
19. The major products obtained when chlorobenzene is nitrated with HNO_3 and H_2SO_4
- a) 1-chloro-4-nitrobenzene
 - b) 1-chloro-2-nitrobenzene
 - c) 1-chloro-3-nitrobenzene
 - d) 1-chloro-1-nitrobenzene
20. Which one of the following is most reactive towards nucleophilic substitution reaction ?
- a) 
 - b) 
 - c) 
 - d) 
21. Ethylidene chloride on treatment with aqueous KOH gives
- a) acetaldehyde
 - b) ethyleneglycol
 - c) formaldehyde
 - d) glyoxal
22. The raw material for Raschig process
- a) chloro benzene
 - b) phenol

c) benzene d) anisole

23. Chloroform reacts with nitric acid to produce

- a) nitro toluene
- b) nitro glycerine
- c) chloropicrin
- d) chloropicric acid

24. acetone $\xrightarrow[\text{ii) H}_2\text{O} / \text{H}^+]{\text{i) CH}_3\text{MgI}}$ X, X is

- a) 2-propanol
- b) 2-methyl-2-propanol
- c) 1-propanol
- d) acetone

25. Silverpropionate when refluxed with Bromine in carbontetrachloride gives

- a) propionic acid
- b) chloro ethane
- c) bromo ethane
- d) chloro propane