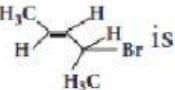


Unit

14**Haloalkanes and
Haloarenes****Choose the best answer.**

1. The IUPAC name of  is

- a) 2-Bromo pent – 3 – ene
- b) 4-Bromo pent – 2 – ene
- c) 2-Bromo pent – 4 – ene
- d) 4-Bromo pent – 1 – ene

2. Of the following compounds, which has the highest boiling point?

- a) n-Butyl chloride
- b) Isobutyl chloride
- c) t-Butyl chloride
- d) n-propyl chloride

3. Arrange the following compounds in increasing order of their density

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

- a) D < C < B < A b) C > B > A > D
- c) A < B < C < D d) C > A > B > D

4. 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

- a) Vinyl b) Allyl
- c) Secondary d) Aralkyl

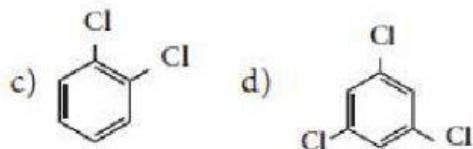
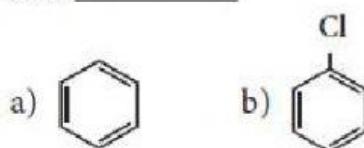
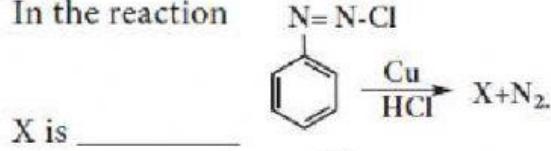
5. What should be the correct IUPAC name of diethyl chloromethane?

- a) 3 - Chloro pentane
- b) 1-Chloropentane
- c) 1-Chloro-1, 1, diethyl methane
- d) 1 -Chloro-1-ethyl propane

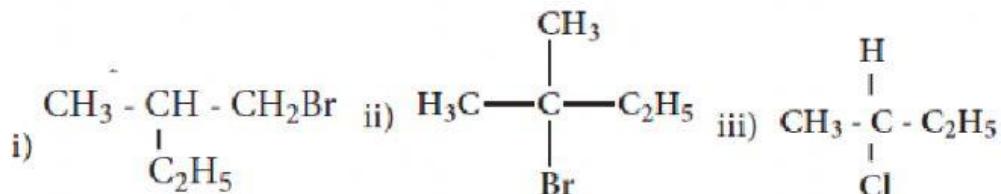
6. C -X bond is strongest in

- a) Chloromethane
- b) Iodomethane
- c) Bromomethane
- d) Fluoromethane

7. In the reaction



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



- a) (i)
- b) (ii) and (iii)
- c) (iii)
- d) (i) and (ii)

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

a) $\text{R}-\text{C}(=\text{O})-\text{R}$ b) $\text{R}-\text{CH}(\text{OH})-\text{R}$
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 ethyldene 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

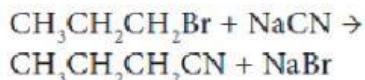
- a) A \rightarrow 2 B \rightarrow 4 C \rightarrow 1 D \rightarrow 3
- b) A \rightarrow 3 B \rightarrow 2 C \rightarrow 4 D \rightarrow 1
- c) A \rightarrow 1 B \rightarrow 2 C \rightarrow 3 D \rightarrow 4
- d) A \rightarrow 3 B \rightarrow 1 C \rightarrow 4 D \rightarrow 2

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

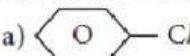
17. The most easily hydrolysed molecule under SN^1 condition is

a) allyl chloride
b) ethyl chloride
c) isopropylchloride
d) benzyl chloride

18. The carbo cation formed in $\text{S}^{\text{N}}1$ reaction of al kyl 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 con 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. Ethyldene chloride on treatment with aqueous KOH gives
a) acetaldehyde
b) ethyleneglycol
c) formaldehyde
d) glycoxal

22. The raw material for Rasching 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 $\xrightarrow{\begin{array}{l} \text{i) } \text{CH}_3\text{MgI} \\ \text{ii) H}_2\text{O / H}^{-1} \end{array}}$ X, X is

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

25. Silverpropionate when refluxed with Bromine in carbontetrachloride gives

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