

# QB365 Question Bank Software Study Materials

## Haloalkanes and Haloarenes 50 Important 1 Marks Questions With Answers (Book Back and Creative)

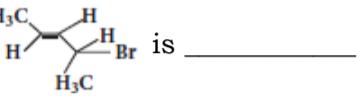
11th Standard

### Chemistry

Total Marks : 50

#### Multiple Choice Question

50 x 1 = 50

- 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)  $\text{CCl}_4$   
B)  $\text{CHCl}_3$   
C)  $\text{CH}_2\text{Cl}_2$   
D)  $\text{CH}_3\text{Cl}$

(a) **D < C < B < A**    (b)  $\text{C} > \text{B} > \text{A} > \text{D}$     (c)  $\text{A} < \text{B} < \text{C} < \text{D}$     (d)  $\text{C} > \text{A} > \text{B} > \text{D}$

- 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 \_\_\_\_\_

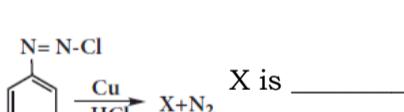
(a) Vinyl    (b) **Allyl**    (c) Secondary    (d) Aralkyl

- 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  X is \_\_\_\_\_.

- (a)     (b)     (c)     (d) 

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

- i)  $\begin{array}{c} \text{CH}_3 - \text{CH} - \text{CH}_2\text{Br} \\ | \\ \text{C}_2\text{H}_5 \end{array}$   
ii)  $\begin{array}{c} \text{CH}_3 \\ | \\ \text{H}_3\text{C} - \text{C} - \text{C}_2\text{H}_5 \\ | \\ \text{Br} \end{array}$   
iii)  $\begin{array}{c} \text{H} \\ | \\ \text{CH}_3 - \text{C} - \text{C}_2\text{H}_5 \\ | \\ \text{Cl} \end{array}$

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

- 9) The treatment of ethyl formate with excess of RMgX gives \_\_\_\_\_

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

- 10) Benzene reacts with  $\text{Cl}_2$  in the presence of  $\text{FeCl}_3$  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. Carbontetra chloride	2. Insecticide
C. CFC	3. Antiseptic
D. DDT	4. Refrigerants

(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 → 3 B → 1 C → 4 D → 2**

14) Consider the reaction,



This reaction will be the fastest in \_\_\_\_\_

(a) ethanol    (b) methanol    **(c) DMF (N, N' – dimethyl formamide)**    (d) water

15) Freon-12 is manufactured from tetrachloro methane by \_\_\_\_\_

(a) Wurtz reaction    **(b) Swarts reaction**    (c) Haloform reaction    (d) Gattermann reaction

16) The most easily hydrolysed molecule under  $SN^1$  condition is \_\_\_\_\_

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

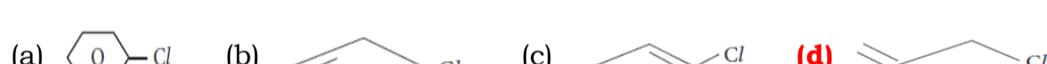
17) The carbo cation formed in  $SN^1$  reaction of alkyl halide in the slow step is \_\_\_\_\_

(a)  $sp^3$  hybridised    **(b)  $sp^2$  hybridised**    (c)  $sp$  hybridised    (d) none of these

18) 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

19) Which one of the following is most reactive towards nucleophilic substitution reaction?



20) Ethylidene chloride on treatment with aqueous KOH gives \_\_\_\_\_

**(a) acetaldehyde**    (b) ethyleneglycol    (c) formaldehyde    (d) glycoxal

21) The raw material for Rasching process \_\_\_\_\_

(a) chloro benzene    (b) phenol    **(c) benzene**    (d) anisole

22) Chloroform reacts with nitric acid to produce \_\_\_\_\_

(a) nitro toluene    (b) nitro glycerine    **(c) chloropicrin**    (d) chloropicric acid

23) acetone  $\xrightarrow[i) H_2O/H^{-1}]{i) CH_3Mgl}$  X, X is \_\_\_\_\_

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

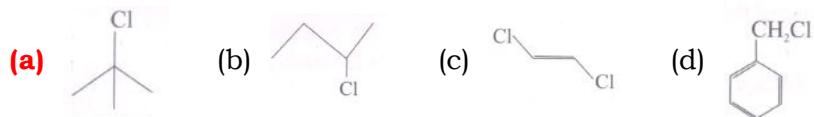
24) Silverpropionate when refluxed with Bromine in carbontetrachloride gives \_\_\_\_\_

(a) propionic acid    (b) chloro ethane    **(c) bromo ethane**    (d) chloro propane

25) Hunsdiecker reaction is used to prepare alkyl chloride and alkyl bromide starting from

(a) diazonium salt    **(b) silver salts of carboxylic acid**    (c) sodium salt of carboxylic acid    (d) alcohol

- 26)  $\text{CH}_3 - \text{CH}_3 - \text{Br} \xrightarrow[\triangle]{\text{KCN}} X \xrightarrow{\text{dil. HCl}} Z$  Z is  
 (a)  $\text{CH}_3\text{CH}_2\text{COOH}$  (b)  $\text{CH}_3\text{COOH}$  (c)  $\text{CH}_3\text{COCl}$  (d)  $\text{CH}_3\text{CONH}_2$
- 27) Ethyl bromide reacts with sodium lead alloy to form\_\_\_\_\_.  
 (a) Chloro ethane (b) 1 - Chluro propane (c) **Vinyl chloride.** (d) Bromo benzene
- 28) For reacting with HCl, the alcohol which does not require  $\text{ZnCl}_2$  is \_\_\_\_\_  
 (a)  $\text{CH}_3\text{CH}_2\text{OH}$  (b)  $\text{CH}_3\text{CH}_2\text{CH}_2\text{OH}$  (c)  $\text{CH}_3\text{CHOH}$  (d)  **$(\text{CH}_3)_3\text{C-OH}$**
- 29) \_\_\_\_\_ is used in the treatment of goitre  
 (a) Halothane (b) Benzoquinone (c) Chloromycetin (d) **Thyroxine**
- 30) The order of stability of the carbonium ion is\_\_\_\_\_.  
 (a)  $1^\circ > 2^\circ > 3^\circ$  (b)  $2^\circ > 3^\circ > 1^\circ$  (c)  $2^\circ > 1^\circ > 3^\circ$  (d)  **$3^\circ > 2^\circ > 1^\circ$**
- 31) Markovnikov's rule is followed for the addition of HCl to\_\_\_\_\_.  
 (a) symmetrical alkene (b) **unsymmetrical alkene** (c) symmetrical alkane (d) unsymmetrical alkane
- 32) Which of the following is an example for polyhalo compounds?  
 (a) Vinyl iodide (b) Chlorobenzene (c) Allyl chloride (d) **Chloroform**
- 33) How many isomers are possible for the formula  $\text{C}_5\text{H}_{11}\text{Br}$ ?  
 (a) 11 (b) **8** (c) 4 (d) 5
- 34) Which of the following is called Lucas reagent?  
 (a) Conc. $\text{H}_2\text{SO}_4$  + Anhydrous  $\text{CuSO}_4$  (b) **Conc.HCl + Anhydrous ZnCl}\_2** (c) Dil. $\text{HCl}$  +  $\text{AlCl}_3$  (d) Conc. $\text{HCl}$  + Conc. $\text{HNO}_3$
- 35) Which of the following mechanism is followed in the halogenation of alkanes in the presence of U-V light?  
 (a) Nucleophilic substitution (b) Electrophilic addition (c) **Free radical substitution** (d) Elimination reaction
- 36) Which one following mechanism will be followed when Tertiary butyl chloride is treated with alcoholic KOH?  
 (a)  $\text{S}_{\text{N}}1$  mechanism (b) **E<sub>1</sub> mechanism** (c)  $\text{S}_{\text{N}}2$  mechanism (d)  $\text{E}_2$  mechanism
- 37) Which one of the following is a gem-dihalide?  
 (a)  $\text{CH}_3\text{CHCl}_2$  (b)  $\begin{matrix} \text{CH}_2 - \text{CH}_2 \\ | \qquad | \\ \text{Cl} \qquad \text{Cl} \end{matrix}$  (c)  $\text{CH}_3 - \text{CH}_2\text{Cl}$  (d)  $\text{C}_6\text{H}_4\text{Cl}_2$
- 38) Which one of the following is used in the conversion of ethylenedichloride to Acetylene?  
 (a) Zn + Methanol (b) **KOH + Ethanol** (c) Aqueous NaOH (d) Alcoholic KOH
- 39) Which one of the following is used as a metal cleaning solvent?  
 (a) Isopropylidene chloride (b) **Methylene chloride** (c) Chloroform (d) Iodoform
- 40)   
 The product X is:  
 (a) (b) (c) (d)
- 41) Which one of the following will undergo SN1 reaction faster?



42) MATCH:

Finkelstein reaction	$\text{C}_6\text{H}_5\text{N}_2\text{Cl} + \text{CCl}_2\text{Cl}_2 + \text{HCl}$
Insecticide	$\text{CH}_3\text{CH}_2\text{Br} + \text{mg}$ in dry ether
Grignard reagent	$\text{CH}_3\text{I} + \text{NaBr}$
Sandmeyer's Reaction	DDT

(a)

A	B	C	D
ii	iii	iv	i

(b)

A	B	C	D
i	ii	iv	iii

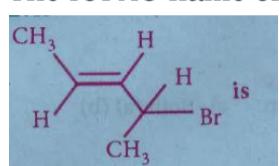
(c)

A	B	C	D
iii	iv	ii	i

(d)

A	B	C	D
iv	i	iii	ii

43) The IUPAC name of



- (a) 2-bromopent-4ene    (b) 2-bromopent-3ene    (c) **4-bromopent-2ene**    (d) 4-bromopent-1 ene

44) Which of the following is an example of Vic - dihalide?

- (a) dichloromethane    (b) **1,2 - dichloro ethane**    (c) Ethylidene chloride    (d) Allyl chloride

45) A Grignard reagent may be made by reacting "Mg" with

- (a) methylamine    (b) diethylether    (c) **ethyl iodide**    (d) ethylalcohol

46) Iodoform can be used as \_\_\_\_\_

- (a) Anaesthetic    (b) **Antiseptic**    (c) Analgesic    (d) Anrifebrin

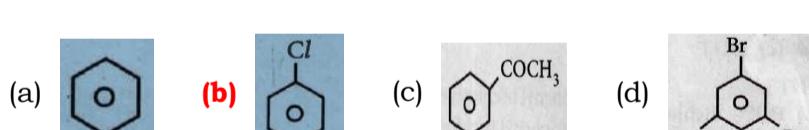
47) The reaction of toluene with chlorine in presence of  $\text{FeCl}_3$  gives \_\_\_\_\_

- (a) **a mixture of O & P - chlorotoluene**    (b) benzyl chloride    (c) m - chloro toluene    (d) benzoyl chloride

48)  $\text{C}_6\text{H}_5\text{N}_2\text{Cl} + \xrightarrow{\text{Warm}} ?$

- (a)  **$\text{C}_6\text{H}_5\text{I}$**     (b)  $\text{C}_6\text{H}_5\text{Kl}$     (c)  $\text{C}_6\text{H}_6$     (d)  $\text{C}_6\text{H}_5\text{OH}$

49) Which one is the product of Raschig's process?



50) Which one is freon - 12?

- (a) **CCITF3**    (b) CC,2F    (c) CCITF    (d) CCI2F2