

CLASS : XII<sup>th</sup>

DATE :

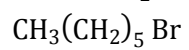
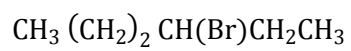
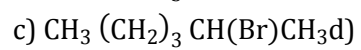
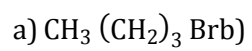
SUBJECT : CHEMISTRY

DPP NO. : 6

## Topic :-HALOALKANES AND HALOARENES

- Which compound is used as helminthicide for elimination of hook worms?  
a) CH<sub>4</sub>                      b) CHCl<sub>3</sub>                      c) C<sub>2</sub>H<sub>2</sub>Cl<sub>4</sub>                      d) CCl<sub>4</sub>
- In the preparation of chlorobenzene from aniline, the most suitable reagent is  
a) Chlorine in the presence of ultraviolet light    b) Chlorine in the presence of AlCl<sub>3</sub>  
c) Nitrous acid followed by heating with Cu<sub>2</sub>Cl<sub>2</sub>    d) HCl and Cu<sub>2</sub>Cl<sub>2</sub>
- Methyl magnesium iodide on treatment with D<sub>2</sub>O furnishes a hydrocarbon, alongwith Mg(OD)I. The hydrocarbon is:  
a) CH<sub>3</sub>D                      b) CH<sub>3</sub>CH<sub>2</sub>D                      c) CH<sub>4</sub>                      d) None of these
- A Grignard reagent is prepared by reacting magnesium with:  
a) Methyl amine                      b) Diethyl ether                      c) Ethyl iodide                      d) Ethyl alcohol
- Identify *A* and *B* in the following reaction  
$$\text{C}_2\text{H}_5\text{Cl} \xrightarrow{\text{A}} \text{C}_2\text{H}_5\text{OH} \xleftarrow{\text{B}} \text{C}_2\text{H}_5\text{Cl}$$
  
a) *A*= aqueous KOH; *B*= AgOH                      b) *A*= alcoholic KOH/ Δ; *B*=aqueous NaOH  
c) *A*= aqueous NaOH; *B*= AgNO<sub>2</sub>                      d) *A* = AgNO<sub>2</sub>; *B* = KNO<sub>2</sub>
- A yellow precipitate is obtained when aqueous AgNO<sub>3</sub> is added to a solution of the compound:  
a) CCl<sub>3</sub>CHO                      b) CHI<sub>3</sub>                      c) CHCl<sub>3</sub>                      d) C<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>Cl
- Which statement is correct?  
a) C<sub>2</sub>H<sub>5</sub>Br reacts with alcoholic KOH to form C<sub>2</sub>H<sub>5</sub>OH  
b) C<sub>2</sub>H<sub>5</sub>Br when treated with metallic sodium gives ethane  
c) C<sub>2</sub>H<sub>5</sub>Br when treated with sodium ethoxide forms diethyl ether  
d) C<sub>2</sub>H<sub>5</sub>Br with AgCN forms ethyl cyanide
- Phosgene is a common name for:  
a) CO<sub>2</sub> and PH<sub>3</sub>                      b) Phosphoryl chloride    c) Carbonyl chloride    d) Carbon tetrachloride
- The alkyl halide which does not give white precipitate with alcoholic AgNO<sub>3</sub> solution is:  
a) Ethyl chloride                      b) Allyl chloride                      c) Isopropyl chloride    d) Vinyl chloride

10. An alkyl halide reacts with equivalent amount of  $\text{NH}_3$  to give:  
 a) Amide                      b) Cyanide                      c) Amine                      d) None of these
11. The combination which produces *t*-butyl alcohol when treated with Grignard reagent:  
 a)  $\text{CH}_3\text{MgBr} + \text{CH}_3\text{COCH}_3$   
 b)  $\text{C}_2\text{H}_5\text{MgBr} + \text{CH}_3\text{COCH}_3$   
 c)  $\text{CH}_3\text{MgBr} + (\text{CH}_3)_2\text{CHOH}$   
 d)  $\text{CH}_3\text{MgBr} + (\text{CH}_3)_3\text{COH}$
12. Methyl chloride on treatment with potassium cyanide followed by hydrolysis yields:  
 a)  $\text{HCOOH}$                       b)  $\text{CH}_3\text{COOH}$                       c)  $\text{CH}_3\text{CN}$                       d)  $\text{CH}_3\text{COOK}$
13. 9.65 C of electric current is passed through fused anhydrous magnesium chloride. The magnesium metal thus, obtained is completely converted into a Grignard reagent. The number of moles of the Grignard reagent obtained is  
 a)  $5 \times 10^{-4}$  b)  $1 \times 10^{-4}$  c)  $5 \times 10^{-5}$  d)  $1 \times 10^{-5}$
14. A bromoalkane 'X' reacts with magnesium in dry ether to form compound 'Y'. The reaction of 'Y' with methanal followed by hydrolysis yield an alcohol having molecular formula  $\text{C}_4\text{H}_{10}\text{O}$ . The compound 'X' is  
 a) Bromoethane                      b) Bromomethane                      c) 1-bromopropane                      d) 2-bromopropane
15.  $\text{C}_2\text{H}_5\text{Br} \xrightarrow{\text{KCN}} (\text{A}) \xrightarrow{\text{Hydrolysis}} (\text{B})$   
 The compound (B) in above reaction is:  
 a) Ethylene chloride                      b) Acetic acid                      c) Propionic acid                      d) Ethyl cyanide
16. A salt solution is treated with chloroform drops and is shaken with chlorine water. Chloroform layer becomes violet, solution contains:  
 a)  $\text{NO}_2^-$                       b)  $\text{NO}_3^-$                       c)  $\text{Br}^-$                       d)  $\text{I}^-$
17. Which of the following is least reactive in a nucleophilic substitution reaction?  
 a)  $(\text{CH}_3)_3\text{CCl}$                       b)  $\text{CH}_2=\text{CHCl}$                       c)  $\text{CH}_3\text{CH}_2\text{Cl}$                       d)  $\text{CH}_2=\text{CHCH}_2\text{Cl}$
18. Ethylidene dichloride ( $\text{CH}_3\text{CHCl}_2$ ) can be prepared by the addition of hydrogen chloride on:  
 a)  $\text{C}_2\text{H}_6$                       b)  $\text{C}_2\text{H}_4$                       c)  $\text{C}_2\text{H}_2$                       d) All of these
19. Which of the following statements is true?  
 a) Allyl chloride is more reactive than vinyl chloride  
 b) Vinyl chloride is as reactive as allyl chloride  
 c) Vinyl chloride is more reactive than allyl chloride  
 d) Both of them are more reactive than chlorobenzene
20. An alkyl halide (RX) reacts with Na to form 4, 5-diethyloctane. Compound RX is



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