DPP
DAILY PRACTICE PROBLEMS

CLASS : XIIth **SUBJECT : CHEMISTRY**
DATE : **DPP NO. : 6**

Topic :-HALOALKANES AND HALOARENES

1. Which compound is used as helminthicide for elimination of hook worms?
   a) CH_4 b) $CHCl_3$ c) $C_2H_2Cl_4$ d) CCl_4

2. 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 $AlCl_3$
   c) Nitrous acid followed by heating with Cu_2Cl_2 d) HCl and Cu_2Cl_2

3. Methyl magnesium iodide on treatment with D_2O furnishes a hydrocarbon, alongwith Mg(OD)I. The hydrocarbon is:
   a) CH_3D b) CH_3CH_2D c) CH_4 d) None of these

4. A Grignard reagent is prepared by reacting magnesium with:
   a) Methyl amine b) Diethyl ether c) Ethyl iodide d) Ethyl alcohol

5. Identify *A* and *B* in the following reaction
$C_2H_5Cl \xrightarrow{A} C_2H_5OH \xleftarrow{B} C_2H_5Cl$
   a) *A*= aqueous KOH; *B*= AgOH b) *A*= alcoholic KOH/ Δ; *B*=aqueous NaOH
   c) *A*= aqueous NaOH; *B*= $AgNO_2$ d) $A = AgNO_2$; $B = KNO_2$

6. A yellow precipitate is obtained when aqueous $AgNO_3$ is added to a solution of the compound:
   a) CCl_3CHO b) CHI_3 c) $CHCl_3$ d) $C_6H_5CH_2Cl$

7. Which statement is correct?
   a) C_2H_5Br reacts with alcoholic KOH to form C_2H_5OH
   b) C_2H_5Br when treated with metallic sodium gives ethane
   c) C_2H_5Br when treated with sodium ethoxide forms diethyl ether
   d) C_2H_5Br with AgCN forms ethyl cyanide

8. Phosgene is a common name for:
   a) CO_2 and PH_3 b) Phosphoryl chloride c) Carbonyl chloride d) Carbon tetrachloride

9. The alkyl halide which does not give white precipitate with alcoholic $AgNO_3$ solution is:
   a) Ethyl chloride b) Allyl chloride c) Isopropyl chloride d) Vinyl chloride

10. An alkyl halide reacts with equivalent amount of 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) $CH_3MgBr + CH_3COCH_3$
    b) $C_2H_5MgBr + CH_3COCH_3$
    c) $CH_3MgBr + (CH_3)_2CHOH$
    d) $CH_3MgBr + (CH_3)_3COH$

12. Methyl chloride on treatment with potassium cyanide followed by hydrolysis yields:
    a) HCOOH b) CH_3COOH c) CH_3CN d) CH_3COOK

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) 5×10^{-4} b) 1×10^{-4} c) 5×10^{-5} d) 1×10^{-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 $C_4H_{10}O$. The compound 'X' is
    a) Bromoethane b) Bromomethane c) 1-bromopropane d) 2-bromopropane

15. $C_2H_5Br \xrightarrow{KCN} (A) \xrightarrow{Hydrolysis} (B)$
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) NO_2^- b) NO_3^- c) Br^- d) I^-

17. Which of the following is least reactive in a nucleophilic substitution reaction?
    a) $(CH_3)_3CCl$ b) $CH_2{=}CHCl$ c) CH_3CH_2Cl d) $CH_2{=}CHCH_2Cl$

18. Ethylidine dichloride (CH_3CHCl_2) can be prepared by the addition of hydrogen chloride on:
    a) C_2H_6 b) C_2H_4 c) C_2H_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 from 4, 5-diethyloctane. Compound RX is

a) $CH_3\ (CH_2)_3\ Br$b)

$CH_3\ (CH_2)_2\ CH(Br)CH_2CH_3$

c) $CH_3\ (CH_2)_3\ CH(Br)CH_3$d)

$CH_3(CH_2)_5\ Br$

PE