Gaining Apex Coaching Centre

(Where Toppers make…… Toppers)

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DPP

DAILY PRACTICE PROBLEMS

CLASS : XIIth **SUBJECT : CHEMISTRY**

DATE : **DPP NO. : 3**

Topic :-HALOALKANES AND HALOARENES

1. In the following reaction:

$C_6H_5CH_2Br \xrightarrow[2.H_3O^+]{1.\ Mg/ether} X$; the product '$X$' is :

a) $C_6H_5CH_2OCH_2C_6H_5$ b) $C_6H_5CH_2OH$ c) $C_6H_5CH_3$ d) $C_6H_5CH_2CH_2C_6H_5$

2. For a given alkyl group, the densities/b. p./m. p. are in the order:
   a) $RI < RBr < RCl$ b) $RI < RCl < RBr$
   c) $RBr < RI < RCl$ d) $RCl < RBr < RI$

3. Carbylamine test is performed by heating alc. KOH with:
   a) $CHCl_3$ and Ag
   b) Trihalogenated methane and primary amine
   c) CH_3Cl and $C_2H_5NH_2$
   d) RCN and RNH_2

4. Which of these compounds is synthesised by chloral?
   a) DDT b) BHC c) Chloroform d) Michlers ketones

5. Iodoform can be prepared from all except:
   a) Isopropyl alcohol b) 3-methyl -2-butanone c) Isobutyl alcohol
   d) Ethyl methyl ketone

6. When vinyl chloride is passed through alcoholic KOH solution:
   a) It dissolves b) It forms vinyl alcohol c) It forms acetylene
   d) It has no action

7. Following compounds are given:

(i) CH_3CH_2OH (ii) CH_3COCH_3

(iii) $CH_3-\underset{\displaystyle CH_3}{\overset{\displaystyle |}{\underset{\displaystyle |}{CH}}}-OH$ (iv) CH_3OH

Which of the above compound(s), on being warmed with iodine solution and NaOH, will give iodoform?

a) (i),(iii) and (iv) b) Only (ii) c) (i), (ii) and (iii) d) (i) and (ii)

8. DDT is obtained by the reaction of chlorobenzene with

a) Chloral b) Chloroform c) Dichloromethane d) Acetaldehyde

9. The reaction products of the reaction between $C_6H_5NH_2$, $CHCl_3$ and KOH are:

a) $C_6H_5NC + KCl$

b) $C_6H_5OH + NH_4Cl + H_2O$

c) $C_6H_5Cl + NH_4Cl + KCl$

d) $C_6H_5CN + KCl$

10. In the reaction,

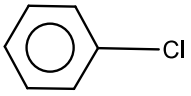
$CH_3C \equiv \bar{C}\ Na^+ + (CH_3)_2CHCl \longrightarrow$

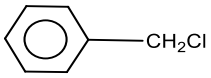
the product formed is:

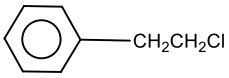
a) 4-methyl-2-pentyne b) Propyne c) Propyne and propene d) None of these

11. Which one of the following chlorohydrocarbons readily undergoes solvolysis?

a) $CH_2 = CHCl$

b) 

c) 

d) 

12. Grignard reagent with hydrogen cyanide gives:

a) Aldehyde b) Ketone c) Both (a) and (b) d) None of these

13. What happens if CCl_4 is treated with $AgNO_3$?

a) A white ppt. of AgCl will form

b) NO_2 will be evolved

c) CCl_4 will dissolve in $AgNO_3$

d) Nothing will happen

14. Among the following which one has weakest carbon-halogen bond?

a) Benzyl bromide b) Bromobenzene c) Vinyl bromide d) Benzyl chloride

15. Of the five isomeric hexanes, the isomer which can give two monochlorinated compounds is

a) 2-methylpentane b) 2,2-dimethylbutane c) 2, 3-dimethylbutane d) *n*-hexane

16. Which of the following compounds gives trichloromethane on distilling with bleaching powder?

a) Methanal b) Phenol c) Ethanol d) Methanol

17. Sodium ethoxide reacts with ethyl iodide to yield:
    a) CH_3CH_3 b) $C_2H_5OCH_3$ c) $C_2H_5OC_2H_5$ d) None of these

18. $CH_3Br + KCN\ (alc.) \rightarrow X \xrightarrow[Na/C_2H_5OH]{Reduction} Y$, what is Y in the series?
    a) CH_3CN b) C_2H_5CN c) $C_2H_5NH_2$ d) CH_3NH_2

19. Identify A and B in the following reactions

$$A \xrightarrow[\Delta]{Aq.NaOH} C_2H_5OH \xleftarrow{AgOH} B$$

    a) $A = C_2H_2, B = C_2H_6$ b) $A = C_2H_5Cl, B = C_2H_4$
    c) $A = C_2H_4, B = C_2H_5Cl$ d) $A = C_2H_5Cl, B = C_2H_5Cl$

20. The reagent used in the conversion of 1-butanol to 1-bromobutane is:
    a) $CHBr_3$ b) Br_2 c) CH_3Br d) $P + Br_2$