

Topic :-HALOALKANES AND HALOARENES

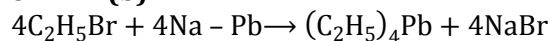
2 (d)

The density order is:

Iodine > Bromide > Chloride > Fluoride.

Higher is the molecular weight, more is b.p, m.p.

3 (b)



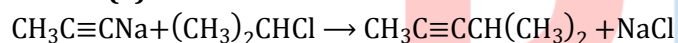
7 (c)

Follow iodoform test.

8 (a)

Chloral + Chlorobenzene \rightarrow DDT

10 (a)



11 (d)

Solvolysis of haloalkanes follows first order kinetics. During this process an intermediate carbocation is formed. Therefore, the haloalkane which gives more stable carbocation undergoes solvolysis readily.

13 (d)

CCl_4 is a covalent compound, therefore, it does not ionise to give Cl^- ions hence, it does not give white ppt. of $AgCl$ when treated with $AgNO_3$ solution. There is no reaction to evolve NO_2 . CCl_4 will form a separate layer as it is immiscible with water.

14 (a)

$C-X$ bond in benzyl bromide is much weaker than in vinyl bromide and bromobenzene since the benzyl cation left after the removal of the bromide ion is stabilized by resonance. Further, $C-Br$ is weaker than $C-Cl$ bond. Therefore, $C_6H_5CH_2Br$ has the weakest $C-X$ bond.

15 (c)

1. 2-methylpentane $\xrightarrow{Cl_2}$ five types of monochlorinated compounds

2. 3-methylpentane $\xrightarrow{Cl_2}$ four types of monochlorinated compounds

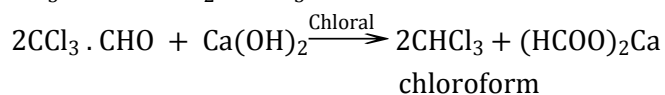
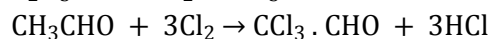
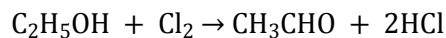
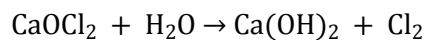
3. 2, 2-dimethylbutane $\xrightarrow{Cl_2}$ three types

4. 2, 3-dimethylbutane $\xrightarrow{Cl_2}$ two types

5. n -hexane $\xrightarrow{\text{Cl}_2}$ three types

16 (c)

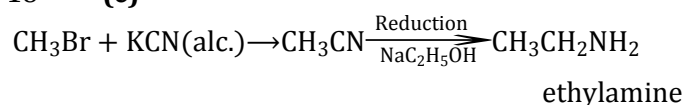
Ethanol on reaction with bleaching powder, gives chloroform (trichloromethane).



17 (c)

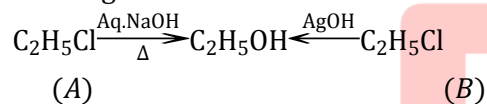
$\text{C}_2\text{H}_5\text{ONa} + \text{C}_2\text{H}_5\text{I} \rightarrow \text{C}_2\text{H}_5\text{OC}_2\text{H}_5 + \text{NaI}$; Williamson's synthesis.

18 (c)

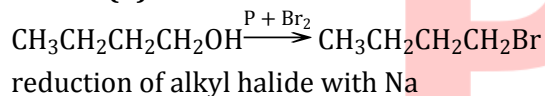


19 (d)

Ethyl chloride can be converted into ethanol either by its alkaline hydrolysis or by its reaction with moist AgOH.



20 (d)



ANSWER-KEY										
Q.	1	2	3	4	5	6	7	8	9	10
A.	C	D	B	A	C	C	C	A	A	A
Q.	11	12	13	14	15	16	17	18	19	20
A.	D	A	D	A	C	C	C	C	D	D

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