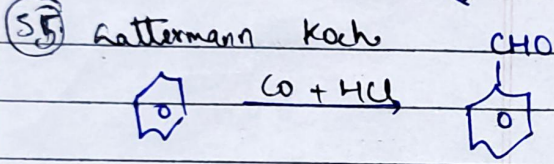
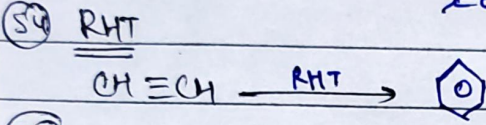
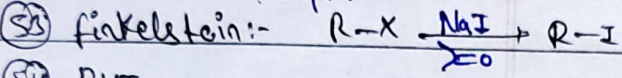
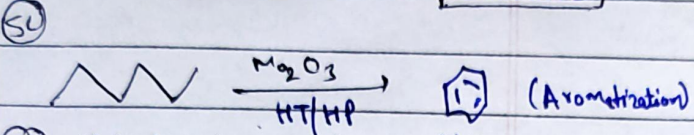
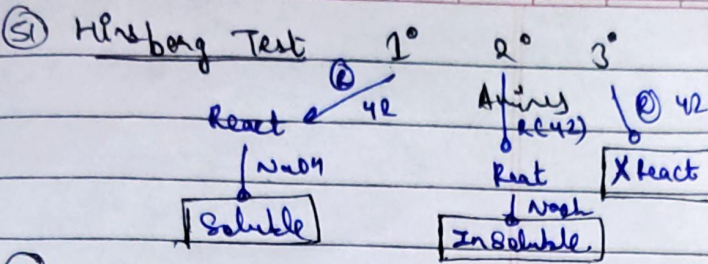


All Concepts

JEE 2021 (main) (OC)

- ① Antimarkovnikov - Add. HBr / Peroxide
- ② Swarts Rxn. Inorganic Fluorides
- ③ Hoffman Bromide Rxn. $KOH + Br_2 / \Delta$
- ④ Diazotization $HNO_2 / NaNO_2 + HCl - 0-5^\circ C$
- ⑤ Coupling via (Azo) Para attack of $N \equiv N^+$
- ⑥ NO_2 retard photochem. (Photochemical smog)
- ⑦ Nitration $HNO_3 + H_2SO_4 \longrightarrow NO_2^+$
(Base) (Acid)
- ⑧ Carius method Halogen cont. Comp $20 [AgNO_3]$
- ⑨ Aldol Condensation Reactivity :- Ald > Ket.
- ⑩ Ferric Ammonium Nitrate :- Alcohol
- ⑪ $CHN_3 + KOH$:- Amine (foul smell)
- ⑫ Clemmensen Redn :- $C=O \longrightarrow CH_2$ (Zn/HCl)
 $2H^+ + 2e^-$
- ⑬ $SOCl_2 - OH$ (localised) SN_i
- ⑭ Cannizzaro Rxn. $C=O$ (No αH) (Oxid. / Red.)
- ⑮ Ether + HI :- $C-O^+$ (3° or Reso) \rightarrow (H)
(1° or 2°) \rightarrow SN_2
- ⑯ Williamson Ether Syn. :- $(-OH^-) R-Br/Cl \rightarrow (RO^-)$
- ⑰ Sandmeyer $\left. \begin{matrix} CuCl_2 / CuBr_2 / CuCN \\ \text{Chatterman} \\ Cu/HCl \text{ or } Cu/HBr \end{matrix} \right\}$
- ⑱ Wurtz (R-R) Fittig (Ph-Ph) Wurtz Fittig (R-Ph)
- ⑲ Selwenoff Test \rightarrow ketose xanthoprotic \rightarrow Protein
- ⑳ 2,4-DNP Test (Brady's) \rightarrow Test For Aldehydes
- ㉑ Aromatic $(4n+2) \pi e^-$; Planar, sp^2
- ㉒ $(tBuOK^+) \rightarrow$ Hoffmann Product.
- ㉓ DIBAL-H \rightarrow (MRA) $\begin{matrix} -C=O \\ | \\ -O-R \end{matrix} \longrightarrow -C=O$
- ㉔ Fat Soluble, Proteins :- (KEDA)
- ㉕ Lindlar's Catalyst :- $H_2 - Pd / CaCO_3 / BaSO_4 / \text{Chancad}$
- ㉖ Photochemical Smog (Day Smog) $\left. \begin{matrix} \text{Chancad} \\ \text{Oxidizing smog} \end{matrix} \right\}$
- ㉗ $PRN^+Cl^- \xrightarrow{\text{warm water}} PR-OH$
- ㉘ Smog (Reducing) Cold weather (Early morning)
{ Smoke + fog + SO_2 }



(56) Chromatography (R_f)

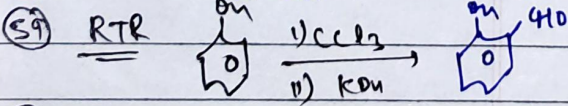
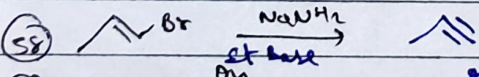
$R_f = \frac{\text{Dist. travelled by sub. from Base line}}{\text{Dist. travelled by Solvent from B.L.}}$

(57)

O3 → Troposphere → Photochemical Smog (PAN)

Satrosphere → UV Rad. Protect

~~Stratosphere~~ (2H2Se1)



(60) Barfoed Test → i) monosaccharides } Dist.
 ii) Disaccharides }

(61) Lonsingf Test :- Na fusion.

→ S, N, P, Halogen (COH) X