










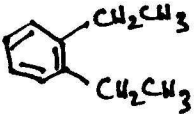
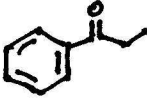



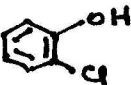


CHAPTER 17 - REACTIONS OF AROMATIC COMPOUNDS

1.  $\xrightarrow[\text{FeBr}_3]{\text{Br}_2}$
2.  $\xrightarrow[\text{H}_2\text{SO}_4]{\text{HNO}_3}$
3.  + $\text{SO}_3 \xrightleftharpoons[\text{H}_3\text{O}^+, \Delta]{\text{H}_2\text{SO}_4}$
4.  +  $\xrightarrow{\text{AlCl}_3}$
5.  +  $\xrightarrow[2) \text{H}_2\text{O}]{1) \text{AlCl}_3}$
6.  + $\text{CO, HCl} \xrightarrow[\text{CuCl}]{\text{AlCl}_3}$
7.  + $\text{NaNH}_2 \longrightarrow$
8.  + $\text{NaNH}_2 \longrightarrow$
9.  + $3\text{Cl}_2 \xrightarrow[\text{or light}]{\text{heat + pressure}}$
10.  + $3\text{H}_2 \xrightarrow[100^\circ\text{C, 1000 psi}]{\text{Ru or Rh}}$
11.  $\xrightarrow[\text{dilute HCl}]{\text{Zn(Hg)}}$
12.  $\xrightarrow[\text{H}_2\text{O}]{\text{hot conc. KMnO}_4}$
13.  $\xrightarrow[\text{h\nu}]{\text{Br}_2}$
14.  $\xrightarrow[\Delta]{\text{CH}_3\text{OH}}$
15.  $\xrightarrow[\text{H}_2\text{SO}_4]{\text{Na}_2\text{Cr}_2\text{O}_7}$