Answer on Question #62095, Chemistry / General Chemistry

Question 1

(a) How will you convert acetylene to but-2-yne.

Solution:

Question 2

(b) Which is the major product obtained when 2-bromo propane is treated with alcoholic KOH? State the rule involved.

Solution:

$$CH_3$$
 H_3C
 Br
 C_2H_5OH
 CH_3
 CH_3
 C_2H_5OH
 CCH_3
 CCH_3

Question 3

(c) Draw the resonating structures of phenol and explain why it influences the incoming electrophile to attack at ortho and para positions.

Solution:

$$\bigcirc_{\mathsf{H}}^{\mathsf{OH}} \stackrel{-\mathsf{H}^*}{\rightleftharpoons} \bigcirc_{\mathsf{O}}^{\mathsf{O}} \longrightarrow \bigcirc_{\mathsf{O}}^{\mathsf$$

Question 4

(d) Why is Corey- House reaction preferred for the preparation of propane as compared to the Wurtz reaction.

Solution:

Because Corey- House reaction can be obtained pure propane not containing impurities:

$$H_3C$$
 Br H_3C CH_3 H_3C CH_3

In the Wurtz reaction always will be gas impurities:

$$H_3C$$
 H_3C CH_3 butane H_3C CH_3 propane -NaBr H_3C CH_3 propane