CHE 173

Winter, 2005

Practice Quiz 7 Answer Key

Name_____

Section: 201 202 203 204 205 206

 $M \quad T \quad W \quad Th \quad F \quad Th \; nt.$

(circle one)

1. Show the products that would form from each of the following reactions (10 pts).

(a)
$$Et_2O$$
 Et_3 + LiBr

(b)
$$\begin{array}{c} \begin{array}{c} \begin{array}{c} \text{1. CH}_3\text{CH}_2\text{MgBr} \\ \\ \text{Et}_2\text{O} \end{array} \end{array} \\ + \text{BrMgOH} \end{array}$$

(c)
$$CuLi$$
 + Cu Et_2O + $Li Br$ + Cu Cu

$$(d) \begin{array}{c} \begin{array}{c} \text{1. 2CH}_3\text{CH}_2\text{MgBr} \\ \\ \text{Et}_2\text{O} \\ \\ \text{2. H}_2\text{O, H}^+ \end{array} \\ \end{array} \begin{array}{c} \text{OH} \\ + \text{ BrMgOH} \end{array}$$

(a)
$$+ ICH_2ZnI \xrightarrow{Et_2O} + ZnI_2$$

2. Provide the reagents and conditions that would effect each of the following steps (A-C) in the synthetic scheme shown below. (10 pts)

$$A = Br_2$$
, $FeBr_3$, heat

$$B = Mg, Et_2O$$

C = 1. 2.
$$H_2O$$
, H^+

OR: 1. $1/2$ CO_2Me 2. H_2O , H^-

3. Show a reason able retrosynthetic analysis and synthesis for each of the target compounds shown below. (10 pts each)

(a)
$$(b)$$
 (c) (c)

Many possibilities here... be creative using the chemistry you learned this week and prior to.