Chemistry 220b, Section 1 Quiz 3 (25 pts) Thursday, March 24, 2011 Chapter 17-18

Name
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Write and sign the VU Honor Pledge:	
	signature

## This Quiz is closed book and closed notes

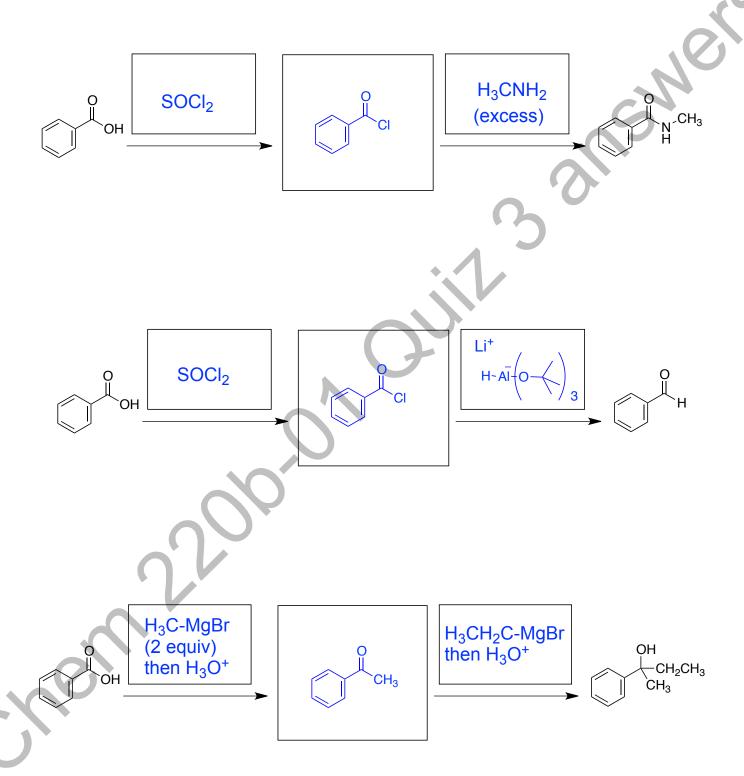
NOTE: It is difficult for me to give you partial credit if you do not show your work!

Neatness counts

Good Luck !!

1. The following transformations cannot be done in one step. Provide all necessary reagents and show the intermediate(s) of the reaction sequences. (15 pts)

Note: other answers may be acceptable



2. Give a complete mechanism for the transesterification of ethyl benzoate to methyl benzoate with catalytic sodium methoxide in methanol. (10 pts)

$$OCH_2CH_3 + H_3CO^-Na^+$$

$$H_3COH$$

$$OCH_3 + H_3CH_2COH$$

H<sub>3</sub>CH<sub>2</sub>CO

H<sub>3</sub>CO

$$H_3CH_2CO^-$$
 +  $H_3CO^-$  +  $H_3CO^-$ 

Problem 1:\_\_\_\_\_(15 pts)

2:\_\_\_\_\_(10 pts)

Total out of 25: