Quiz 02 - **KEY** 01 March 2004

3 Points Each. Please mark your answers on the scantron sheet. You may keep this copy.

1. Which of the following would be LEAST reactive for electrophilic aromatic substitution?

a)
$$H_3C$$
 CH_3 CH_3

2. Which of the following would be MOST reactive for electrophilic aromatic substitution?

a)
$$H_3C$$
 CH_3 H_2N CH_3 O_2N CO_2H CO_2H

3. Which of the following alcohols would have the lowest pK_a?

a)
$$\stackrel{\text{OH}}{\longleftarrow}$$
 CF₃ C) $\stackrel{\text{HO}}{\longleftarrow}$ CH₃ d) $\stackrel{\text{OH}}{\longleftarrow}$

4. What is the product of methyl magnesium bromide, with the following ester?

5. Which product is the result of reaction of mCPBA with 1,2-dimethylcyclohexane?

6. Which of the following is NOT a valid resonance form for nitrobenzene?

7. What is the product of the following reaction?

