

**Chem 2300
Bonus Quiz**

December 5, 2008

Name: _____ **(Please print)**
(First) (Last)

Last 4 digits of Banner No.	Score				
<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>					
I. Multiple Choice (/10)	/20				
Total score	/20				

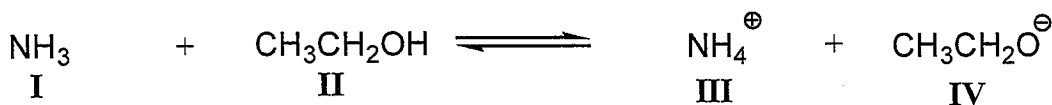
I. Multiple choice questions. Please put your answers on Scantron sheet. Your score will be graded based only on your answers from Scantron sheet. (10 questions, 20 points)

1. What could be the dominant forms of compounds found in the following acid/base reaction?



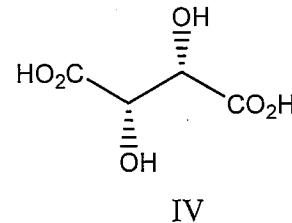
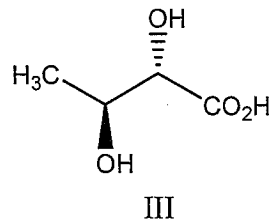
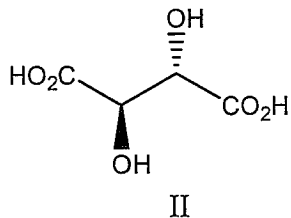
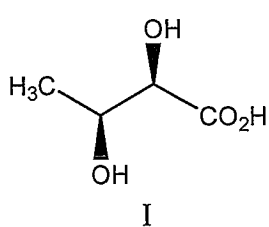
- (a) I, II
- (b) III, IV
- (c) I, III
- (d) II, IV
- (e) None of the above

2. What could be the dominant forms of compounds found in the following acid/base reaction?



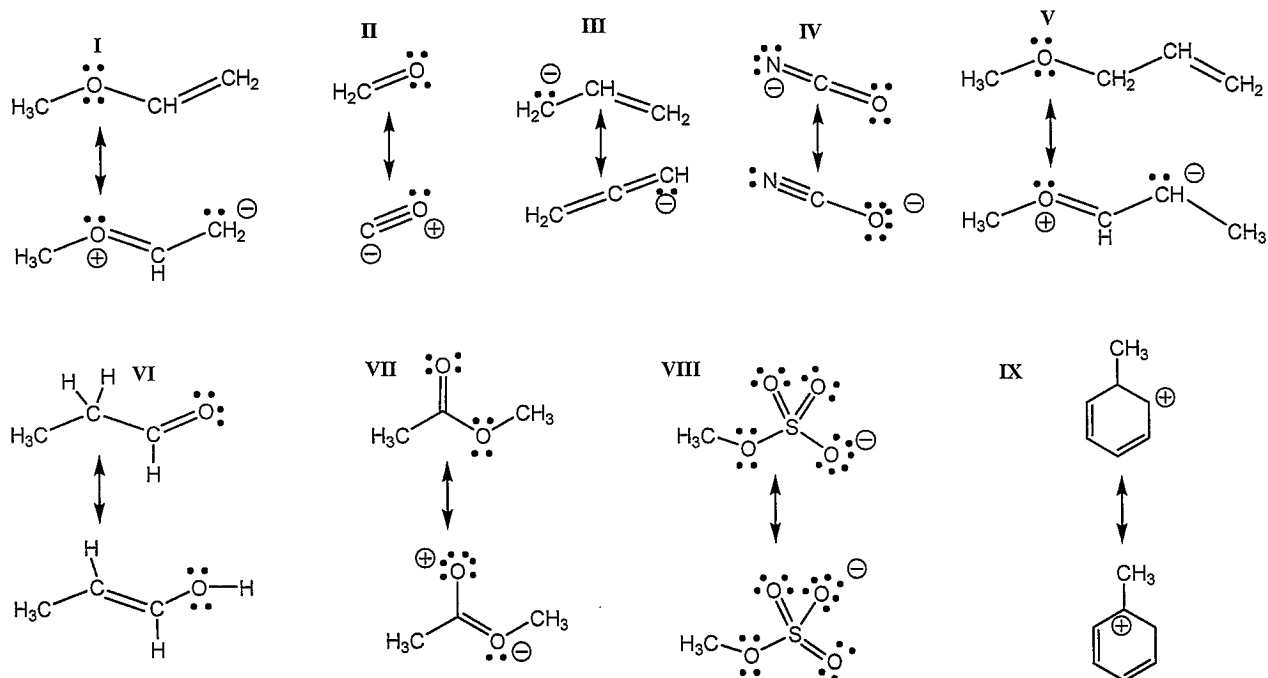
- (a) I, II
- (b) III, IV
- (c) I, III
- (d) II, IV
- (e) None of the above

3. Which of the following compound is a meso compound?



- (a) I
- (b) II
- (c) III
- (d) IV
- (e) None of the above

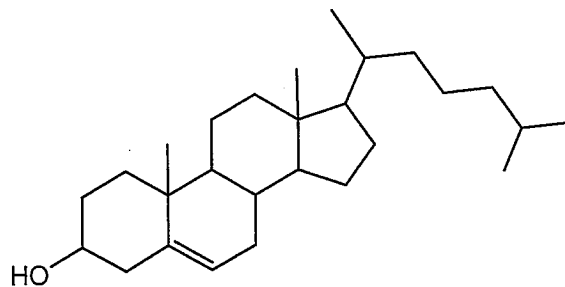
4. Which of the following are pairs of resonance structures?



- (a) I, IV, VII, VIII, IX
 (b) I, II, VII, IX
 (c) I, IV, VIII, IX
 (d) I, II, IV, VI, IX
 (e) None of the above

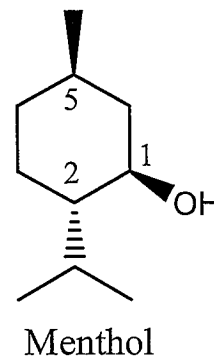
5. For the structure on the right, how many stereoisomers are possible?

- (a) 64
 (b) 128
 (c) 256
 (d) 512
 (e) 1024



6. What is the IUPAC name for menthol?

- (a) (1R,2S,5R)-2-isopropyl-5-methylcyclohexanol
 (b) (1R,2R,5S)-2-isopropyl-5-methylcyclohexanol
 (c) (1S,2R,5S)-2-isopropyl-5-methylcyclohexanol
 (d) (1S,2R,5R)-2-isopropyl-5-methylcyclohexanol
 (e) None of the above

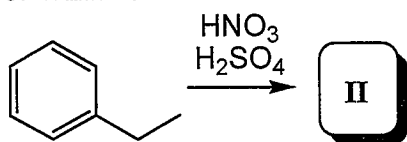


7. Which of the following compounds are aromatic compounds?



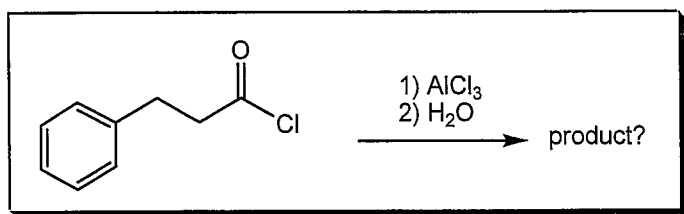
- (a) III, IV, VI
 (b) II, V, VII, VIII
 (c) III, VI, VII
 (d) III, VI, VII, VIII
 (e) None of the above

8. What could be the structure of compound II?



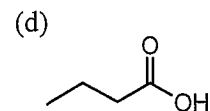
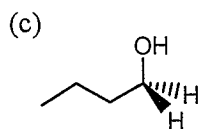
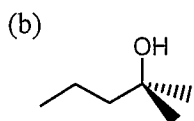
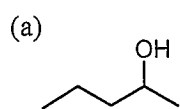
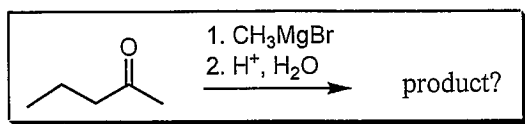
- (a) (b) (c) (d) (e) None of the above

9. What could be the product for the following reaction?



- (a) (b) (c) (d) (e) None of the above

10. What could be the product for the following reaction?



(e) None of the above