Chemistry 351

Quiz #8

October 31, 2018

Name: _____

Student Number: _____

Section Number: _____

TA: _____

INSTRUCTIONS:

This quiz consists of 7 questions on 3 pages. Please make certain that your quiz is complete.

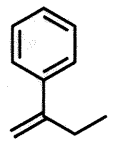
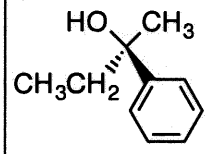
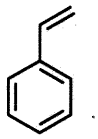
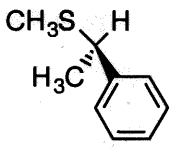
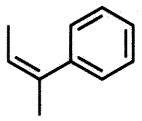
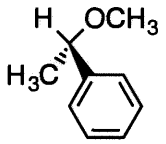
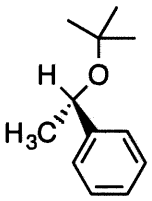
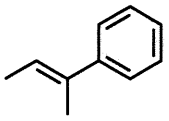
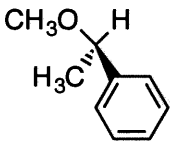
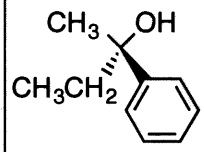
Write your name, student number, and section number **on both the quiz and answer sheet. Be certain to bubble in your PID digits on the answer sheet. The absence of any of these identification items will result in the deduction of 2 points from your score.**

Questions 1-6 are each worth 1 point. Question 7 is worth 4 points.

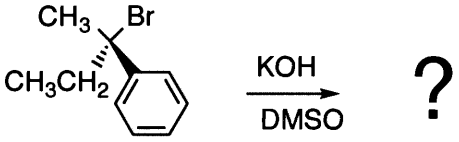
Write your answers to Questions 1-6 on the enclosed answer sheet. **Write your answers to Question 7 in the space provided on this quiz.**

When you complete the quiz, insert your answer sheet into your quiz and then hand both in on the bench in front of the lecture hall in the spot indicated by your section number.

Questions 1-5 are to be answered from the following possibilities:

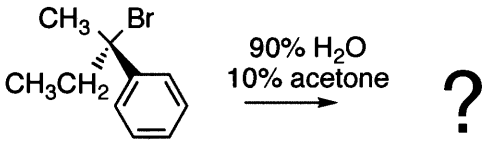
1. 	2. 	3. 	4. 	5. 
6. 	7. 	8. 	9. 	10. 

1. What is (are) the product(s) formed in the following reaction:



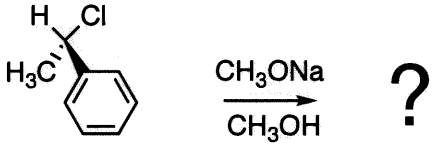
a. 1 b. 5,8 c. 2 d. 10 e. 1,5,8 f. 2,5,8 g. 1, 2, 5, 8 h. 1,5,8,10 i. 1,2,5,8,10 j. 1, 2,10

2. What is (are) the product(s) formed in the following reaction:



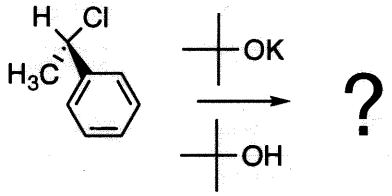
a. 1 b. 5,8 c. 2 d. 10 e. 1,5,8 f. 2,5,8 g. 1, 2, 5, 8 h. 1,5,8,10 i. 1,2,5,8,10 j. 1, 2,10

3. What is (are) the product(s) formed in the following reaction:



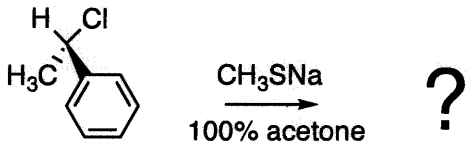
a. 3,9 b. 3 c. 6 d. 9 e. 6,9 f. 7 g. 4 h. 3,4 i. 3,7 j. 3,6

4. What is (are) the product(s) formed in the following reaction:



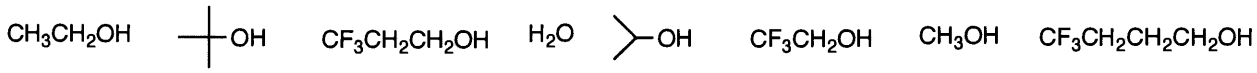
a. 3,9 b. 3 c. 6 d. 9 e. 6,9 f. 7 g. 4 h. 3,4 i. 3,7 j. 3,6

5. What is (are) the major product(s) formed in the following reaction:



a. 3,9 b. 3 c. 6 d. 9 e. 6,9 f. 7 g. 4 h. 3,4 i. 3,7 j. 3,6

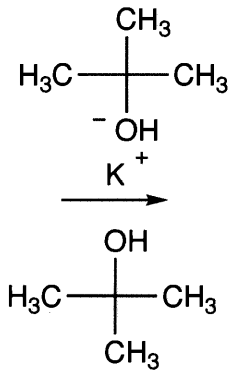
6. The conjugate base of which alcohol will remove > 99% of the proton from methanol?

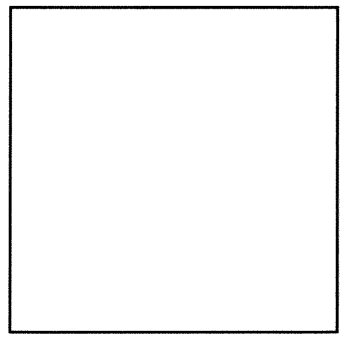


a. b. c. d. e. f. g. h.

7. (4 pts) In the reaction of 1-chloro-1-phenylpropane with potassium *t*-butoxide:
   a. Draw the arrows showing the flow of electrons for all bonds broken and all bonds formed during the reaction.
   b. In the labeled boxes, provide the structures of the Organic Product (containing carbon) that are formed from each specified conformation of 1-chloro-1-phenylpropane.

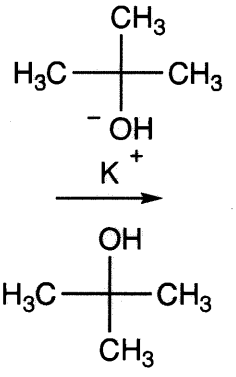
1-chloro-1-phenylpropane

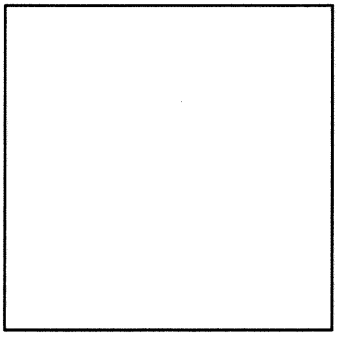




Organic Product A

1-chloro-1-phenylpropane





Organic Product B