

Name: KEY

Advanced Organic Chemistry

ID #: _____

Fall 2007

Quiz #6, Friday, December 14, 2007

1. Multiple choice. Circle the correct answer (3 pts).

A) The alternative interpretation of the nonclassical norbornyl cation was put forward by H.C. Brown who argued that all available data were consistent with the intermediate as a _____ equilibrating classical _____ ion.

- a) slowly, primary
- b) rapidly, primary
- c) slowly, secondary
- d) rapidly, secondary

B) An _____ elimination reaction is a concerted process.

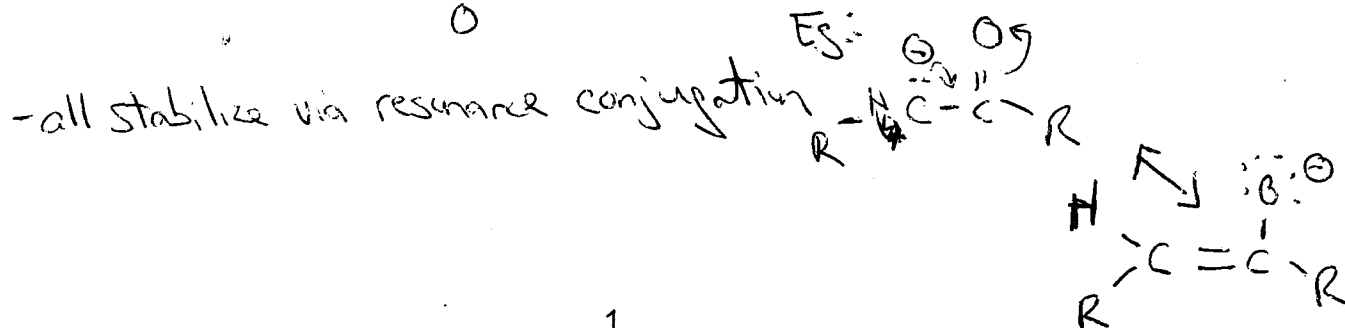
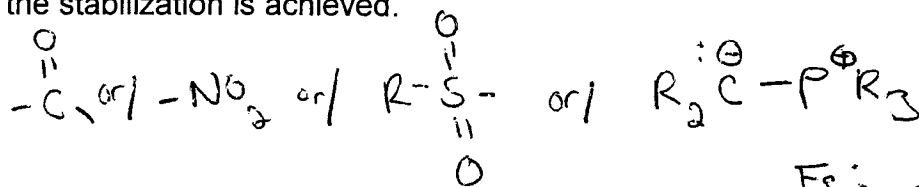
- a) E1
- b) E2
- c) E1cb

C) The pKa of CH₃-CH₃ is approximately:

- a) 1
- b) 10
- c) 25
- d) 50

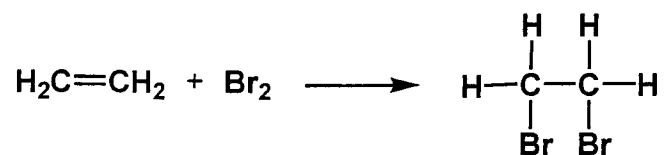
2. Consider the information below and answer the questions that follow (3 pts).

Give an example of a functional group that stabilizes carbanions. Clearly illustrate how the stabilization is achieved.



3. Consider the information below and answer the question that follows (9 pts).

Halogenation of ethylene produces a 1,2-dibromide as follows:



Give the mechanism for the reaction in the space provided.

