



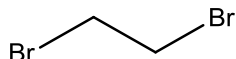
Exam 10 2014, questions and answers

Chemistry B (University of South Africa)

**CHE1502 MAY/JUNE 2014**  
**SECTION B MEMORANDUM**

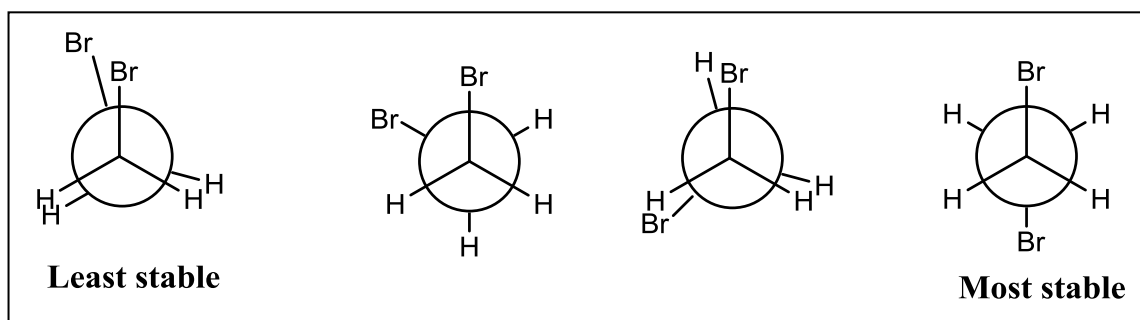
**Question 1 [10]**

- (a) Draw the Newman projections of the different conformations of the following compound.



Identify the most stable and least stable conformation.

(6)

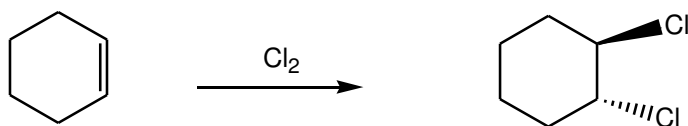


- (b) Draw the structure of any secondary amine. Give the IUPAC name of the compound. (4)

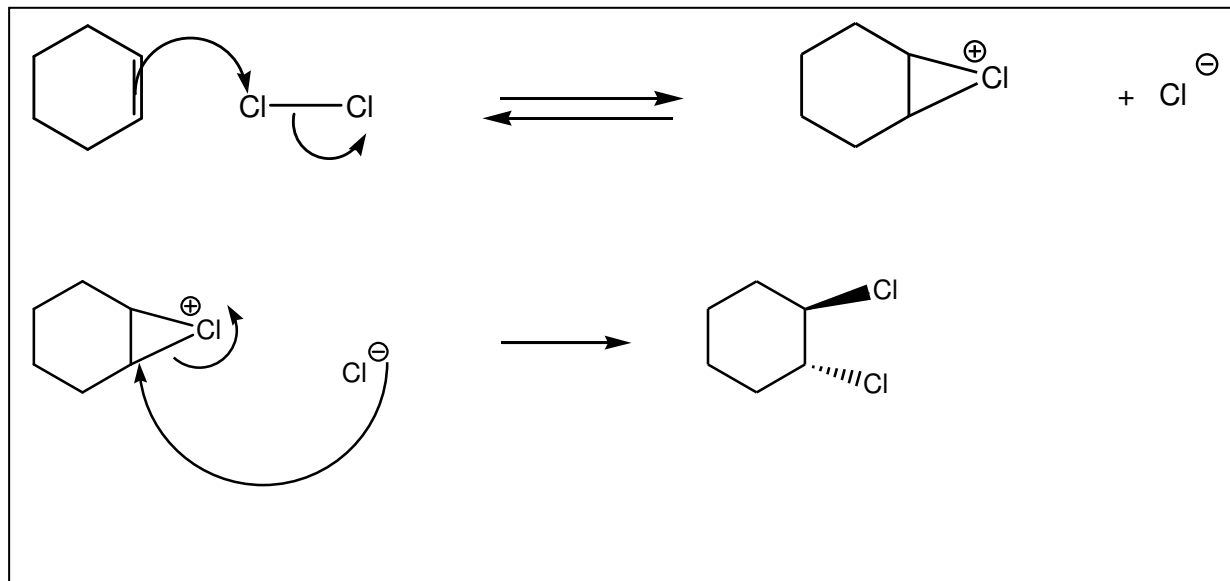
ANY STRUCTURE HAVING NITROGEN WITH 2 ALKYL/ARYL GROUPS AND ONE H ATTACHED TO IT

**Question 2 [10]**

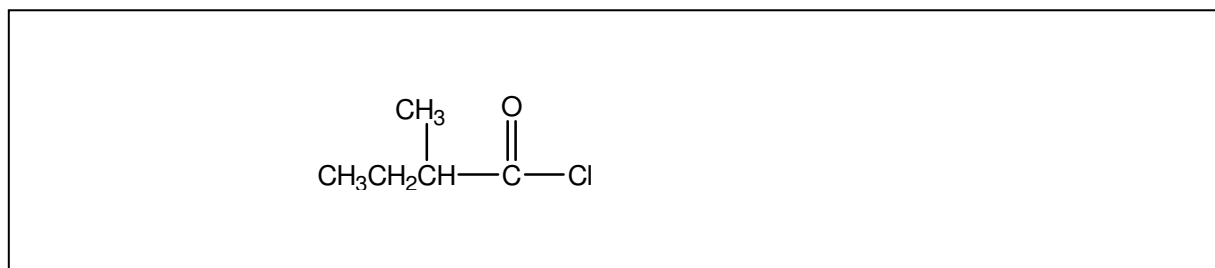
- (a) Write the detailed mechanism of the following reaction:



(6)



(b) Draw the correct structure of 2-methylbutanoyl chloride. (2)



(c) Use curved arrows to show how the bond(s) break or form in the following process. (2)

