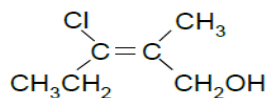
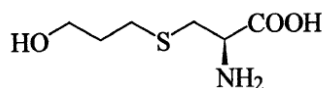


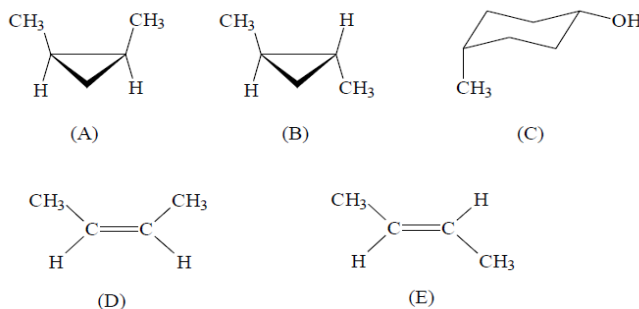
Q1) a- Show Z or E isomer? 10 marks



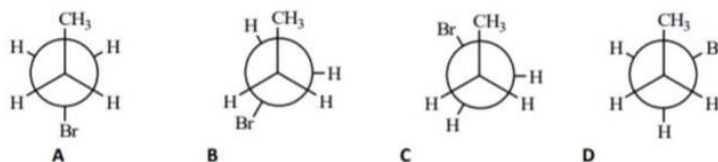
b- Which enantiomer of the Mucolytic fudosteine is shown below?



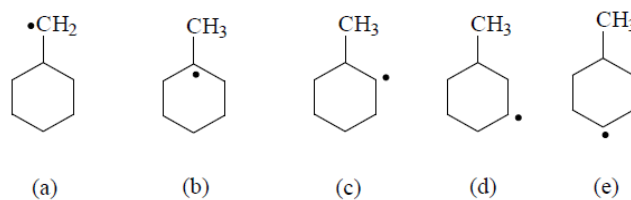
Q2) a- Which of the following molecules is chiral? What is the relationship between (A and B), (D and E)? 10 marks



b- Which of the following is the most stable conformation of 1-bromopropane?



Q3) a- Which of the following free radical is the most stable? 10 marks

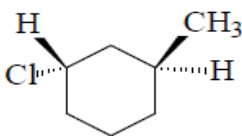


b- Give reasons why? (±)2-Butanol is optically inactive.

Continue in the back.....

Q4) a- Circle only **ONE** choice, circling more than one will be counted as wrong! 10 marks

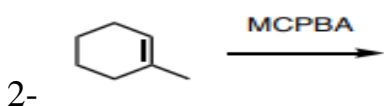
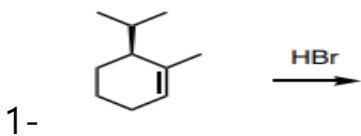
The correct IUPAC name for the following compound is:



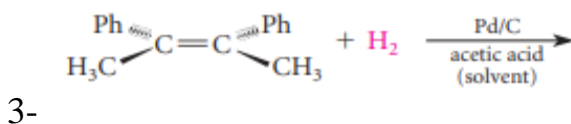
- (A) (1R, 3R)-1-chloro-3-methylcyclohexane
- (B) (1R, 3S)-1-chloro-3-methylcyclohexane
- (C) (1S, 3S)-1-chloro-3-methylcyclohexane
- (D) (1S, 3R)-1-chloro-3-methylcyclohexane
- (E) None of the above.

Q4) b- How many prochirality centers has butanone? Where are they in the molecule?

Q5) Complete these reactions showing the stereochemistry of each product.
10 marks



meta-Chloroperoxybenzoic acid



Good Luck

Dr. Media N. Abdullah