

CHM 1321-D

**First Midterm
(Prof. S. Gambarotta)**

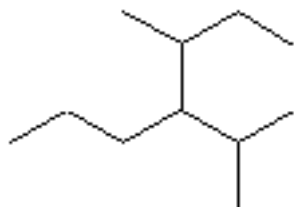
Feb - 2014

Your Name: _____

Student #: _____

1. You must respond to all exercises.
2. Please be clear with your answers
3. No remarking for exams written in pencil.

Question 1



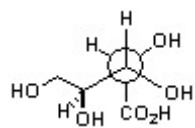
An IUPAC name for

is:

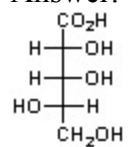
3-Methyl-4-(1-methylethyl)heptane

Question 2

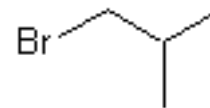
Translate the structure below to a Fischer projection.



Answer:



Question 3

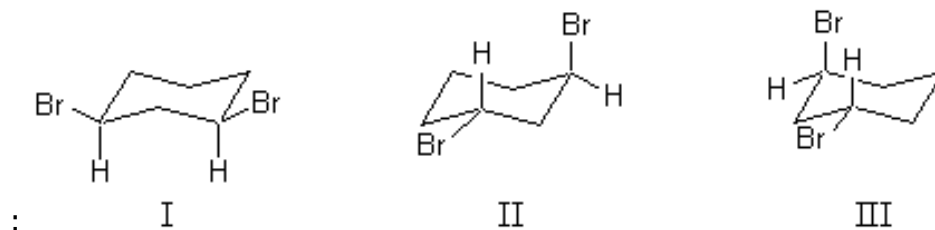


What is the common name for this compound?

- Isobutyl bromide

Question 4

Draw cis-1,3-Dibromocyclohexane



Structure I

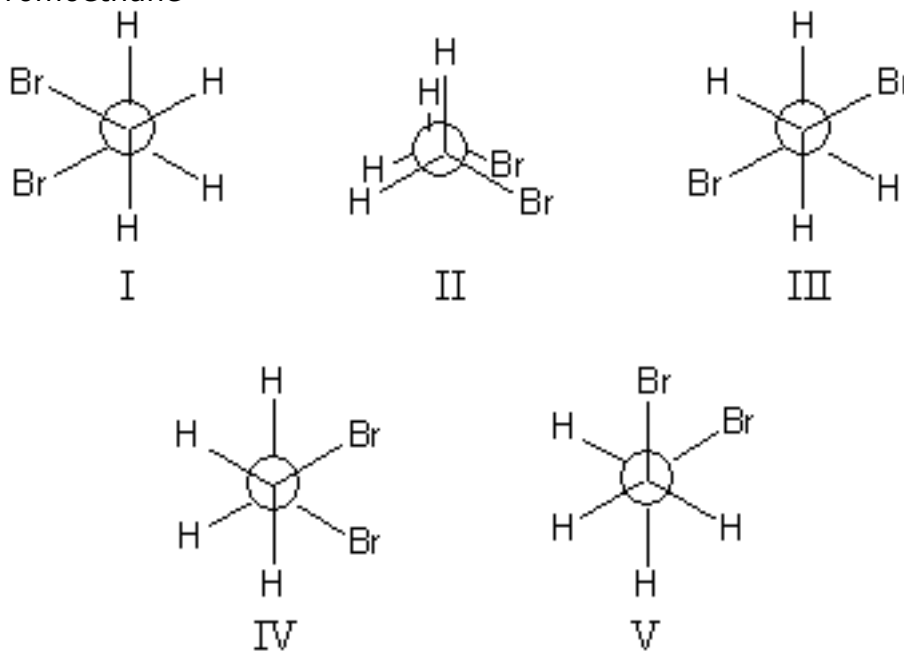
Question 5

Which cycloalkane has the greatest ring strain?

cyclopropane

Question 6

Draw the Newman projection of the most stable conformation of 1,2-dibromoethane



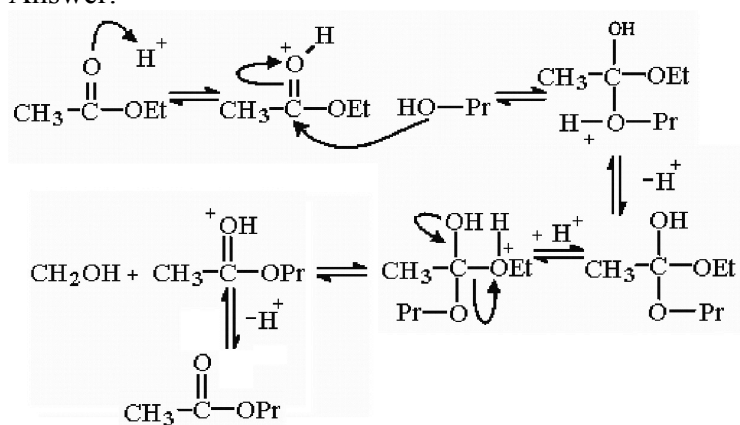
is:

Structure III

Question 7

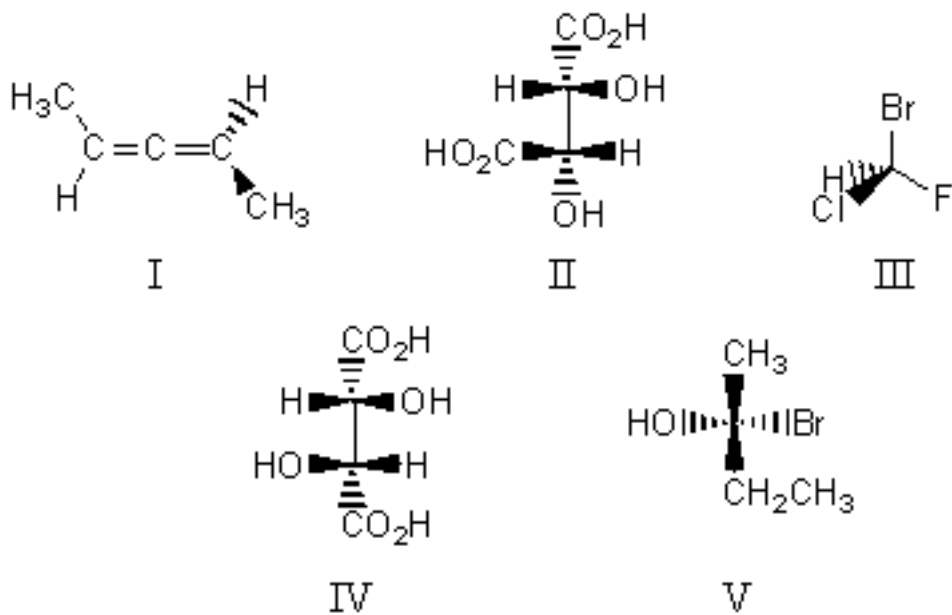
Provide a detailed, stepwise mechanism for the acid-catalyzed transesterification of ethyl acetate with *n*-propanol.

Answer:



Question 8

Which of the following molecules is

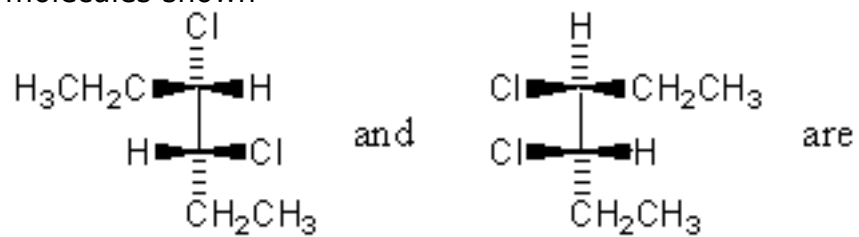


achiral?

Structure II

Question 9

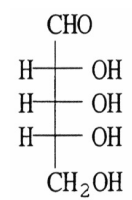
The molecules shown



⊙ diastereomers.

Question 10

Label each asymmetric carbon in the compound below as *R* or *S*.



Answer:

