



Unit 7 - Week 5

Assignment 5

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2019-09-04, 23:59 IST.

 1) The boat conformation of cyclohexane is one of the various conformers 1 point

- a. True
b. False

- a.
 b.

No, the answer is incorrect.
Score: 0

Accepted Answers:
b.

 2) The boat conformation of cyclohexane has 1 point

- a) 2 eclipsed butane interactions
b) 2 gauche butane interactions
c) 6 gauche butane interactions
d) 6 eclipsed butane interactions

- a)
 b)
 c)
 d)

No, the answer is incorrect.
Score: 0

Accepted Answers:
a)

 3) The chair conformation of cyclohexane has 1 point

- a) 4 gauche butane interactions
b) 6 gauche butane interactions
c) 2 eclipsed butane interactions
d) The butane units are all present anti conformations

- a)
 b)
 c)
 d)

No, the answer is incorrect.
Score: 0

Accepted Answers:
b)

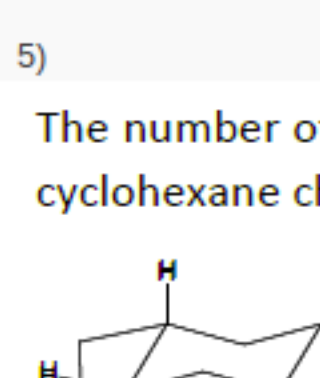
 4) Cyclopropane suffers from 1 point

- a) Only angle strain
b) Only torsional strain
c) Both angle strain and torsional strain

- a)
 b)
 c)

No, the answer is incorrect.
Score: 0

Accepted Answers:
c)

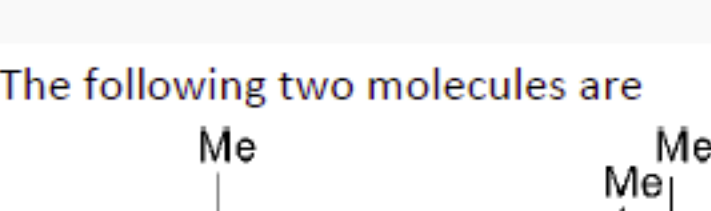
 5) The number of extra gauche butane interactions in the following molecule as compared to two cyclohexane chair forms is 1 point


- a. 2
b. 3
c. 4

- a.
 b.
 c.

No, the answer is incorrect.
Score: 0

Accepted Answers:
b.

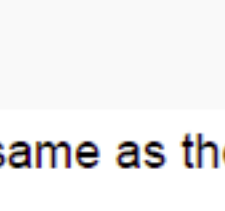
 6) The following two molecules are 1 point


- a. Mirror images
b. Identical
c. Diastereomers

- a.
 b.
 c.

No, the answer is incorrect.
Score: 0

Accepted Answers:
a.

 7) Which structure is same as the following? 1 point


- a)
b)
c)

- a)
 b)
 c)

No, the answer is incorrect.
Score: 0

Accepted Answers:
a)

 8) Which statement regarding the preferred conformations of cis and trans 9,10-dimethyl decalin is true? 1 point

- a) Both the conformations have equal energy
b) Both the molecules exist as resolvable dl-pair
c) Cis isomer has more energy than the trans isomer
d) Cis isomer is more stable than the trans isomer

- a)
 b)
 c)
 d)

No, the answer is incorrect.
Score: 0

Accepted Answers:
a)

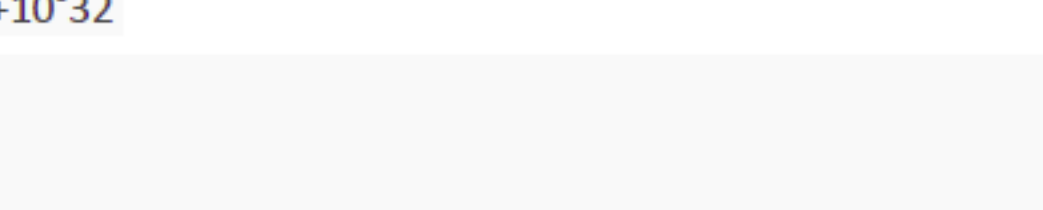
 9) The Baeyer's angle strain in planar cyclohexane is (assume the angle between bonds in a sp^3 carbon $109^{\circ}28'$) 1 point

- a) $+5^{\circ}16'$
b) $-5^{\circ}16'$
c) $-10^{\circ}32'$
d) $+10^{\circ}32'$

- a)
 b)
 c)
 d)

No, the answer is incorrect.
Score: 0

Accepted Answers:
b)

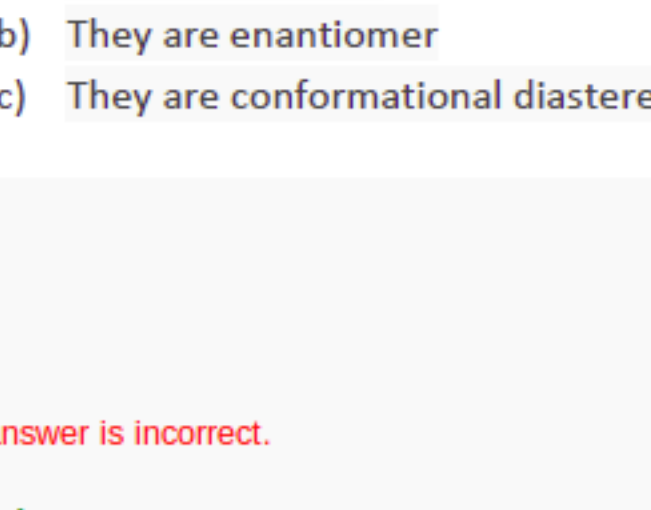
 10) The relationship between the flipped forms of trans 1,3-dimethyl cyclohexane is 1 point


- a) They are identical
b) They are enantiomer
c) They are conformational diastereomers

- a)
 b)
 c)

No, the answer is incorrect.
Score: 0

Accepted Answers:
a)

 11) The conformation having maximum energy during flipping of cyclohexane is 1 point


- a)
 b)
 c)

No, the answer is incorrect.
Score: 0

Accepted Answers:
c)

 12) Cis-decalin exists as a 1 point


- a) non-resolvable dl-pair
b) as a resolvable dl pair
c) as a mixture of conformational diastereomers

- a)
 b)
 c)

No, the answer is incorrect.
Score: 0

Accepted Answers:
a)

Course outline

How to access the portal

Week 0 Assignment 0

Week 1

Week 2

Week 3

Week 4

Week 5

 Lecture 18: Conformations of Cyclic Systems

 Lecture 19: Conformations of Cyclic Systems (Contd.)

 Lecture 20: Conformation of Cyclobutane and Cyclopentane

 Lecture 21: Conformation of Cyclohexane

 Lecture 22: Energy Changes During Flipping

 Lecture 23: Energy Comparison between Chair and Boat Conformations

 Quiz : Assignment 5

 Feedback for Week 5

Week 6

Week 7

Week 8

Download Videos

TRANSCRIPTS

Assignment Solution