

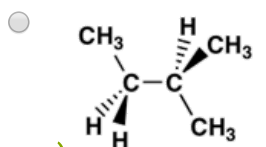
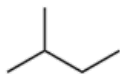
Chapter 4: Multiple Choice Questions

Instructions

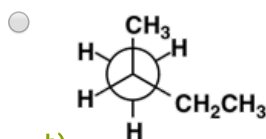
Answer the following questions and then press 'Submit' to get your score.

Question 1

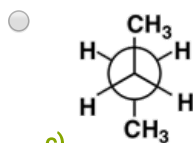
Which structure is of a compound different from the following?



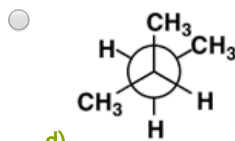
a)



b)



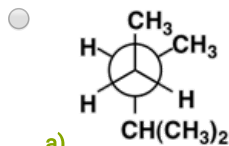
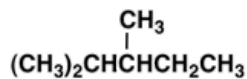
c)



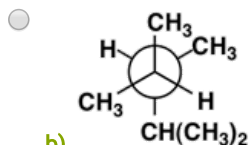
d)

Question 2

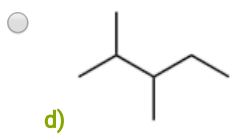
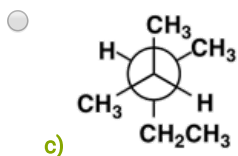
Which structure is of a compound different from the following?



a)

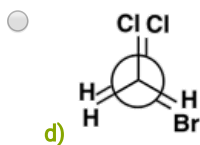
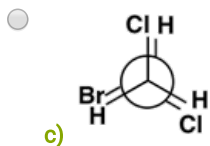
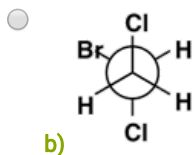
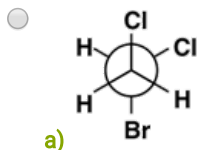


b)



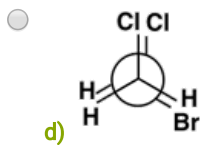
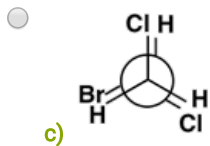
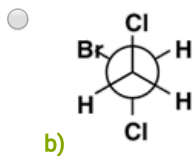
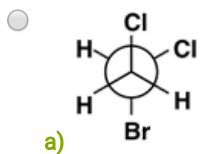
Question 3

Which of (a)-(d) is the most stable conformation?



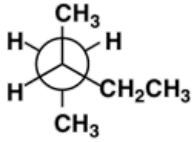
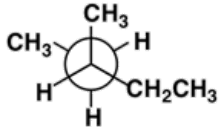
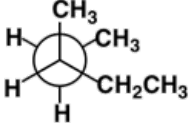
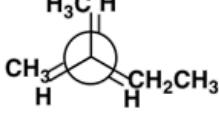
Question 4

Which of (a)-(d) is the most unstable conformation?



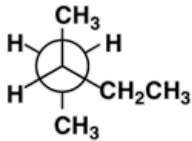
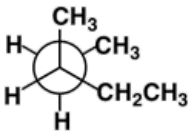
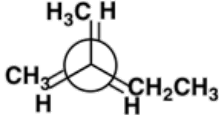
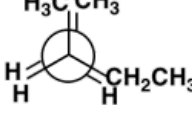
Question 5

Which of (a)-(d) is the most stable conformation?

- ☐ a) 
- ☐ b) 
- ☐ c) 
- ☐ d) 

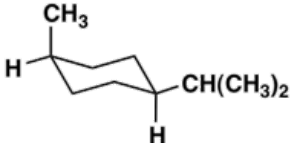
Question 6

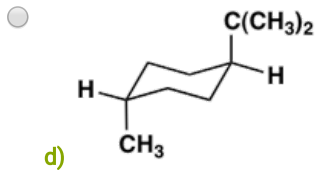
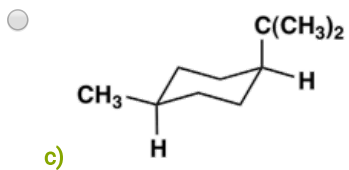
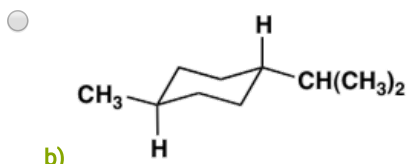
Which of (a)-(d) is the most unstable conformation?

- ☐ a) 
- ☐ b) 
- ☐ c) 
- ☐ d) 

Question 7

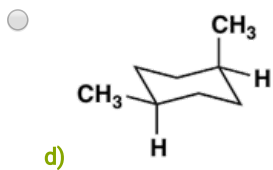
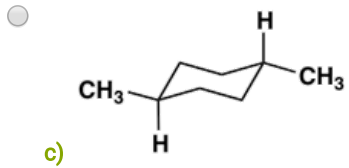
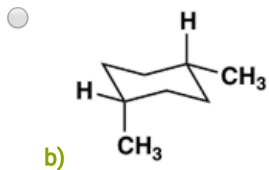
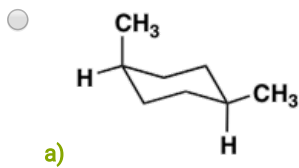
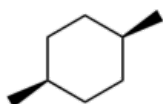
Which is the most stable structure of 1-isopropyl-4-methylcyclohexane?

- ☐ a) 



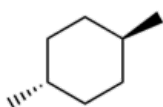
Question 8

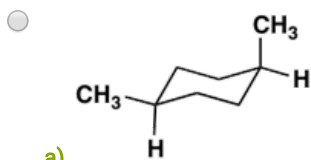
Which structure is different from the following?



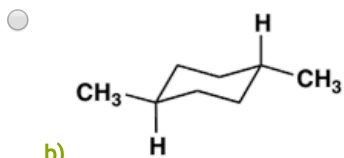
Question 9

Which structure is different from the following?

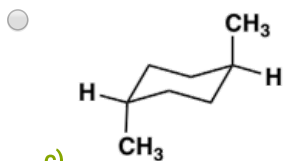




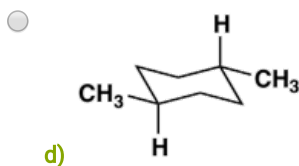
a)



b)



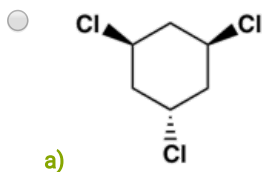
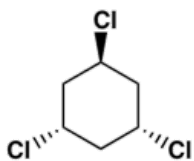
c)



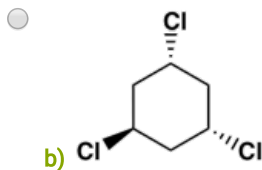
d)

Question 10

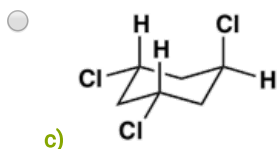
Which structure is different from the following?



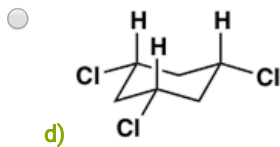
a)



b)



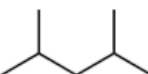
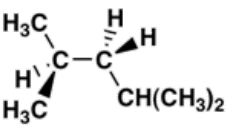
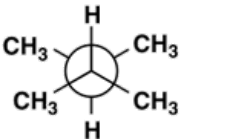
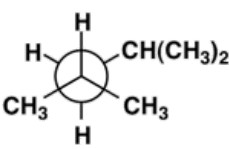
c)



d)

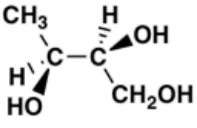
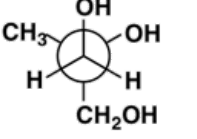
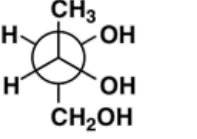
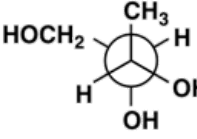
Question 11

Which compound is different from the others?

- ☐ a) 
- ☐ b) 
- ☐ c) 
- ☐ d) 

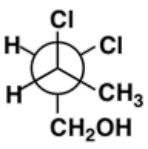
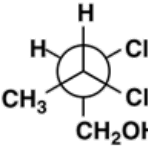
Question 12

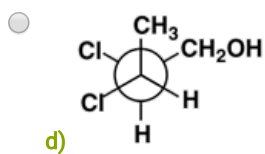
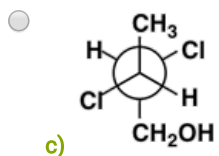
Which compound is different from the others?

- ☐ a) 
- ☐ b) 
- ☐ c) 
- ☐ d) 

Question 13

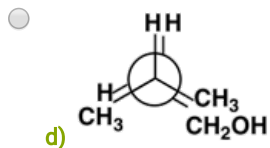
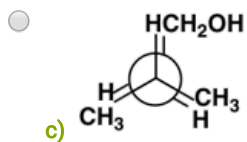
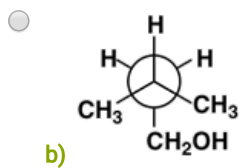
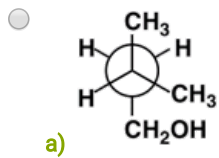
Which is the most stable conformation?

- ☐ a) 
- ☐ b) 



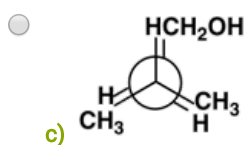
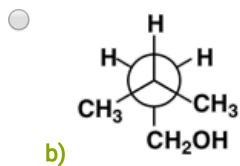
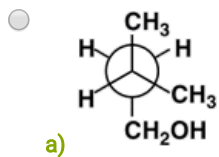
Question 14

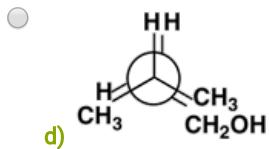
Which of (a)-(d) is the most stable?



Question 15

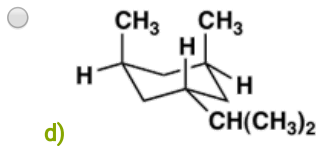
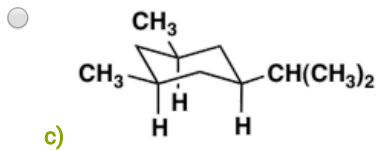
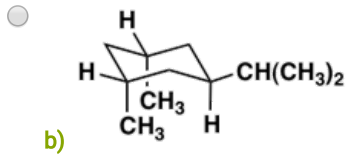
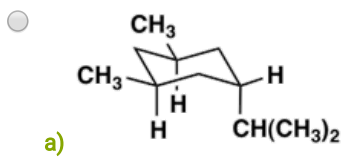
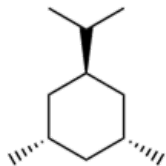
Which of (a)-(d) is the most unstable?





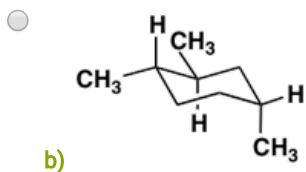
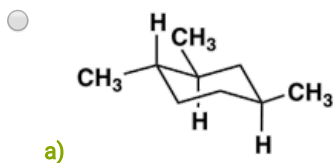
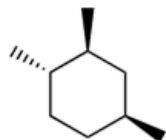
Question 16

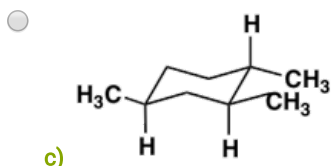
Which structure is different from the following?



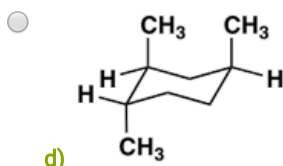
Question 17

Which structure is different from the following?





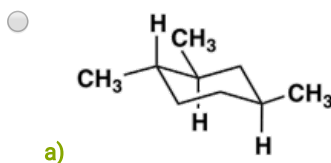
c)



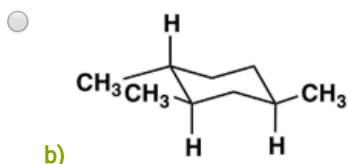
d)

Question 18

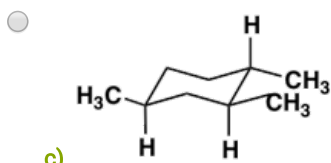
Which conformation is most unstable?



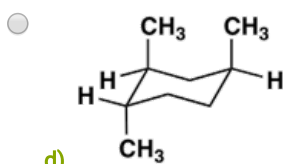
a)



b)



c)



d)

Question 19

Which of the following statements regarding cycloalkanes is wrong?

- ☐ a) Any disubstituted cycloalkane can have *cis-trans* isomers.
- ☐ b) The planar form of any cycloalkane with a ring larger than cyclopropane will not be the most stable conformation.
- ☐ c) Cyclopentane is nonplanar to avoid the torsional strain between adjacent C-H bonds.
- ☐ d) The least strained form of any unsubstituted cycloalkane is the chair conformation of cyclohexane.

Question 20

Which of the following statements regarding chair cyclohexane is wrong?

- ☐ a) The dihedral angle of the two axial bonds on adjacent carbons is 180° .
- ☐ b) The dihedral angle of the two equatorial bonds on adjacent carbons is 60° .
- ☐ c) The dihedral angle between the axial bond and the equatorial bond on adjacent carbons is 120° .
- ☐ d) The axial hydrogen atoms on C1, C3, and C5 form an equilateral triangle (as do C1, C3, and C5 themselves and the equatorial hydrogens on them).

Submit my answers

Clear my answers