CHEM*2700

Organic Chemistry I

(2011W)

Quiz 1

Assignment Type

Questions/Exercises

Student Access Settings Current date: January 20, 2011, 03:40 PM

Start Date:	25 Jan 2011 at 10:00 AM
Due Date:	31 Jan 2011 at 05:00 PM
Student Access After Due Date:	No

Assignment Policies

Graded:	Yes

Question Policies

Attempts per Question:	up to 1 (This limit is set by your instructor.)
Question Feedback:	disabled until after Due Date
Show Work:	Disabled

Question Assistance	**Policies**
Show Links:	never
Show Answer:	never

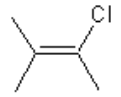
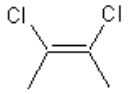
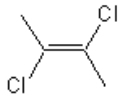
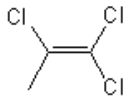
Description / Instructions

Due Date: January 31 (Monday) at 5:00 pm

Q. 1

Testbank Question 14

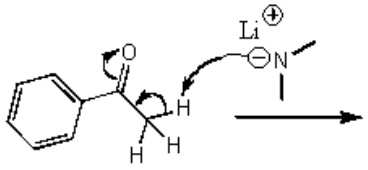
Which molecule(s) has/have dipole moment(s) equal to zero?

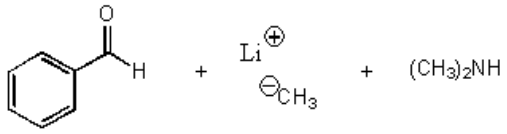
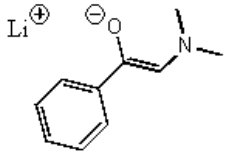
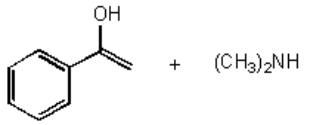
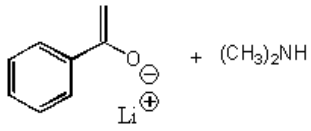
- 
- 
- 
- 
- None of these have dipole moment equal to zero.

Q. 2

Testbank Question 16

What is/are the product(s) of the following acid-base mechanism?



- 
- 
- 
- 
- None of the above

Q. 3

Testbank Question 2

How many constitutional isomers are possible for the formula C_6H_{14}?

- 3
- 4
- 2
- (•) 5
- 6

Q. 4

Testbank Question 29

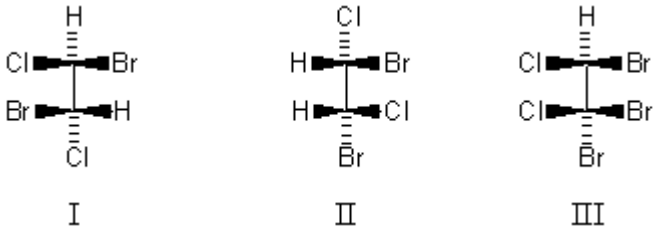
Which is the strongest acid?

- CH_3CH_2OH
- CH_3CH_3
- (•) CH_3CO_2H
- $CH_2=CH_2$
- 

Q. 5

Testbank Question 4

Which molecule is achiral?



- I
- II
- III
- More than one of these
- None of these

Q. 6

Testbank Question 4

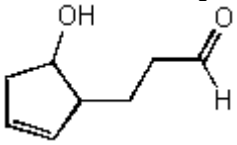
Phenol is the name commonly assigned to:

- Methoxybenzene
- Aminobenzene
- Ethylbenzene
- Methylbenzene
- Hydroxybenzene

Q. 7

Testbank Question 50

Which functional groups are present in the following compound?



- Alkene, 1º alcohol, ketone
- Alkyne, 2º alcohol, ketone
- Alkene, 2º alcohol, aldehyde
- Alkene, 2º alcohol, ketone
- Alkyne, 1º alcohol, aldehyde

Q. 8

Testbank Question 88

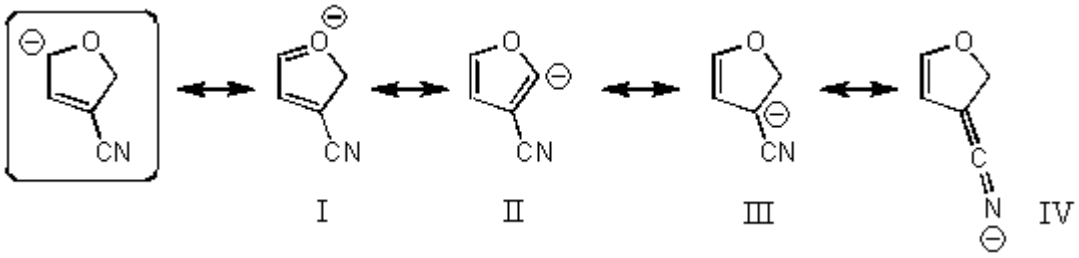
Which acid-base reaction would <u>not</u> take place as written?

- $CH_3CO_2H + CH_3ONa \rightarrow CH_3CO_2Na + CH_3OH$
- $CH_3OH + NaNH_2 \rightarrow CH_3ONa + NH_3$
- $CH_3Li + CH_3CH_2CH_2CH_2NH_2 \rightarrow CH_4 + CH_3CH_2CH_2CH_2NHLi$
- $CH_3C{\equiv}CH + NaOCH_3 \rightarrow CH_3C{\equiv}CNa + CH_3OH$
- $HC{\equiv}CNa + H_2O \rightarrow HC{\equiv}CH + NaOH$

Q. 9

Testbank Question 50

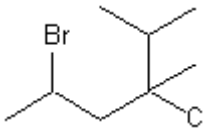
Which of the following species are resonance forms of the species in the box?



- I and III
- I and II
- III and IV
- II and IV
- All of the above are correct resonance forms.

Q. 10

Testbank Question 18

The correct IUPAC name for  is:

- 2-Bromo-4-chloro-4-isopropylpentane
- 2-Bromo-4-chloro-4,5-dimethylhexane
- 4-Bromo-2-chloro-2-isopropylpentane
- 5-Bromo-3-chloro-2,3-dimethylhexane
- 2-(2-Bromopropyl)-2-chloro-3-methylbutane

Q. 11

Testbank Question 72

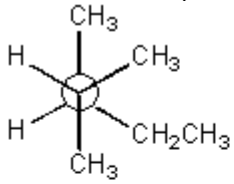
Which is the strongest acid?

- $CH_3CHBrCH_2CH_2CH_2CO_2H$
- $CH_3CH_2CH_2CHICH_2CO_2H$
- $CH_3CH_2CH_2CH_2CHFCO_2H$
- $CH_3CH_2CH_2CHFCH_2CO_2H$
- $CH_3CH_2CH_2CHClCH_2CO_2H$

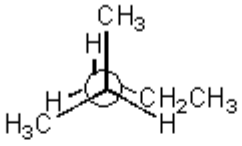
Q. 12

Testbank Question 28

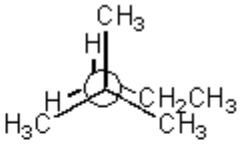
The least stable conformation of 2,3-dimethylpentane, viewed through the C-2—C-3 bond (*i.e.*, C-2 in the front, C-3 in the back):



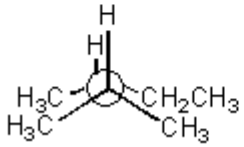
I



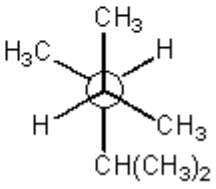
II



III



IV

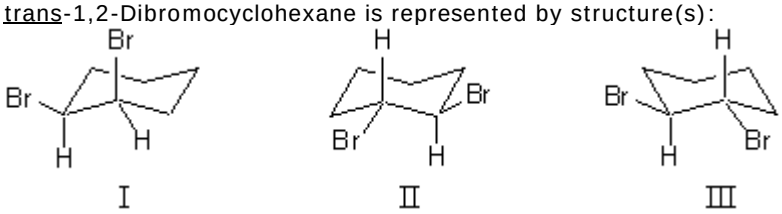


V

- III
- I
- V
- II
- IV

Q. 13
Testbank Question 69

trans-1,2-Dibromocyclohexane is represented by structure(s):



- II
- I and II
- III
- II and III
- I

Q. 14
Testbank Question 77

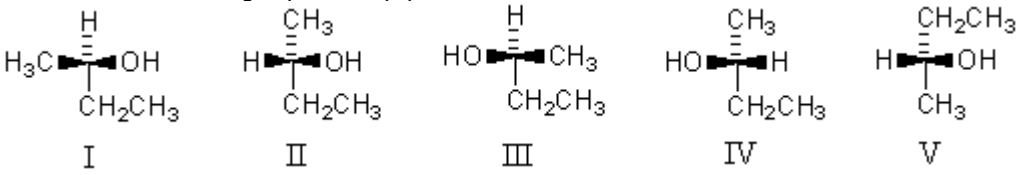
The most stable conformation of trans-1-tert-butyl-3-methylcyclohexane is the one in which:

- the methyl group is axial and the tert-butyl group is equatorial.
- both groups are equatorial.
- the twist boat conformation is adopted.
- the tert-butyl group is axial and the methyl group is equatorial.
- both groups are axial.

Q. 15

Testbank Question 10

Which of the following represent (R)-2-butanol?

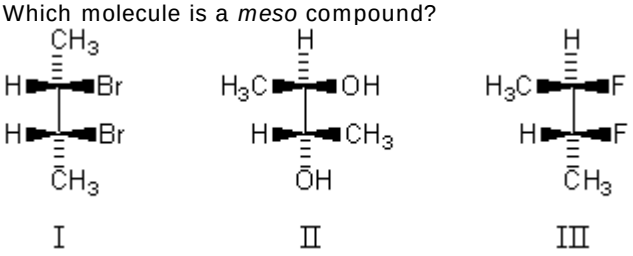


- I and III
- I, II, IV and V
- III and V
- I, III, IV and V
- I, IV and V

Q. 16

Testbank Question 32

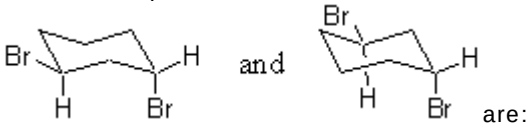
Which molecule is a *meso* compound?



- I
- II
- III
- More than one of the above
- None of the above

Q. 17
Testbank Question 41

The two compounds shown below are:

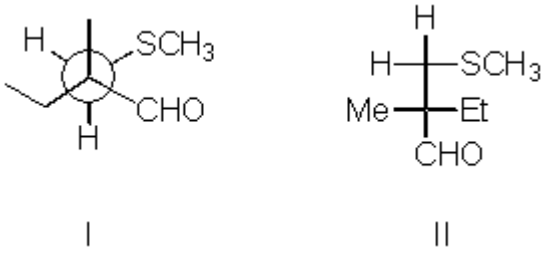


are:

- identical.
- conformational isomers.
- enantiomers.
- meso forms.
- diastereomers.

Q. 18
Testbank Question 91

I and II are:



I II

- not isomeric.
- constitutional isomers.
- enantiomers.
- identical.
- diastereomers.

Q. 19
Testbank Question 53

The molecules below are:

- constitutional isomers.
- enantiomers.
- diastereomers.
- identical.
- None of these

Q. 20
Testbank Question 80

Which is a *meso* compound?

- (2R,4R)-2,4-Dibromopentane
- (2R,4S)-2,4-Dibromohexane
- (2R,4S)-2,4-Dibromopentane
- (2R,3R)-2,3-Dibromobutane
- (2R,3S)-2,3-Dibromopentane