

Unit 5 - Week 3

Course outline

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 Lecture 11 : Axial Chirality in Allenes, Biphenyls

 Lecture 12 : Relative Configuration, Prochiral Faces and Prochiral Centres

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Assignment Solution

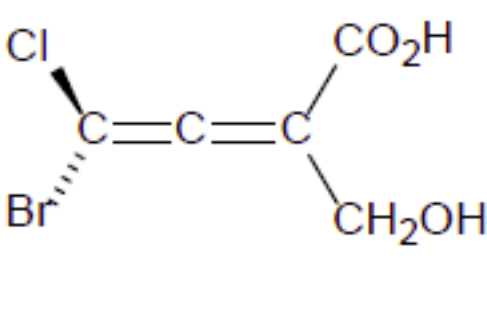
Assignment 3

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

Due on 2019-08-21, 23:59 IST.

1) The absolute configuration of the following molecule is S.

1 point



- a. True
b. False

- a.
 b.

No, the answer is incorrect.

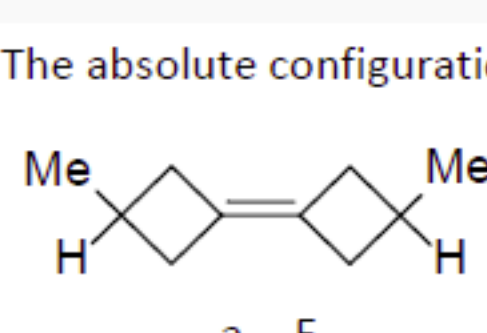
Score: 0

Accepted Answers: a.

a.

2) The absolute configuration of the following molecule is

1 point



- a. E
b. Z
c. R
d. S

- a.
 b.
 c.
 d.

No, the answer is incorrect.

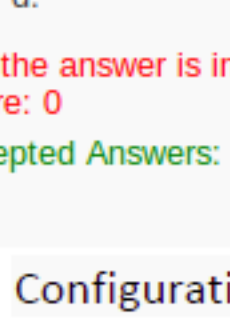
Score: 0

Accepted Answers: b.

b.

3) Configuration of the following molecule is R.

1 point



- a. True
b. False

- a.
 b.

No, the answer is incorrect.

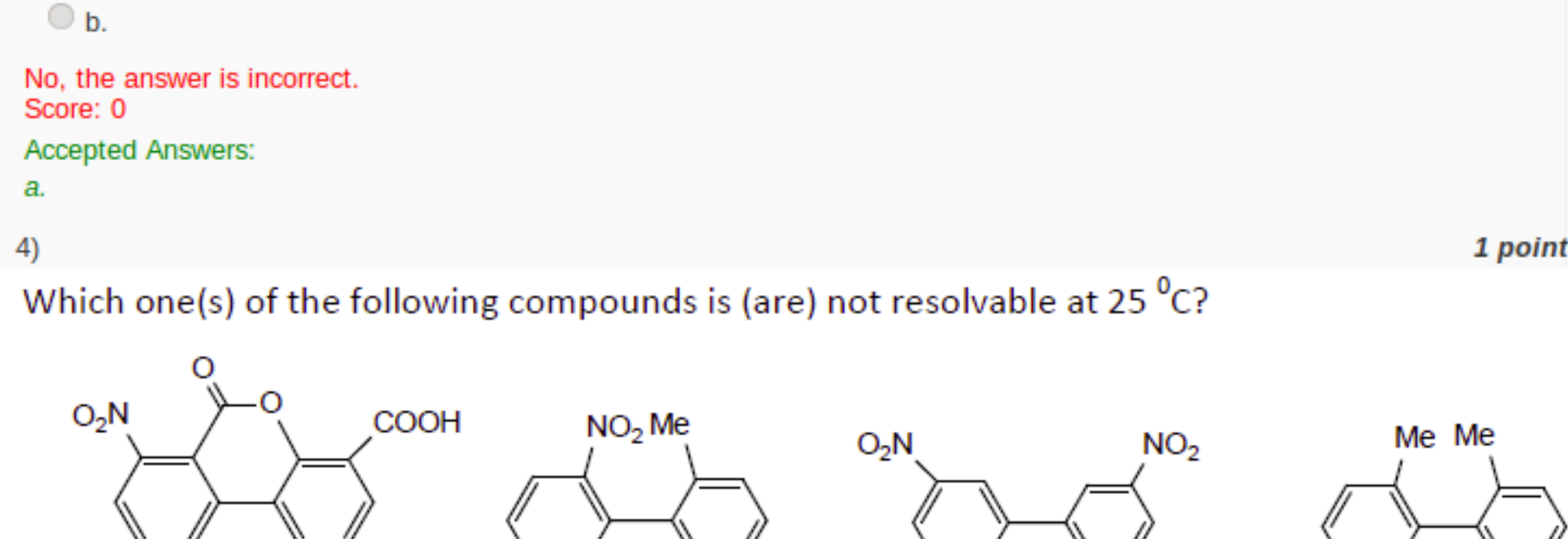
Score: 0

Accepted Answers: a.

a.

4) Which one(s) of the following compounds is (are) not resolvable at 25 °C?

1 point



- a. I and II
b. I and III
c. I only
d. I and IV

- a.
 b.
 c.
 d.

No, the answer is incorrect.

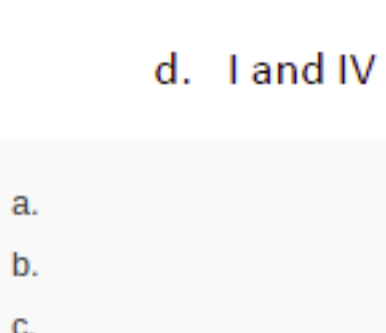
Score: 0

Accepted Answers: b.

b.

5) The circled hydrogens in the following molecule are

1 point



- a. Homotopic
b. Enantiotopic
c. Diastereotopic

- a.
 b.
 c.

No, the answer is incorrect.

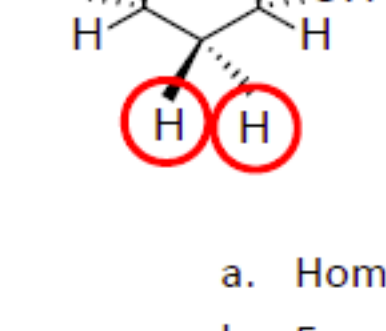
Score: 0

Accepted Answers: c.

c.

6) The two circled hydrogens in the following structure are

1 point



- a. Homotopic
b. Enantiotopic
c. Diastereotopic

- a.
 b.
 c.

No, the answer is incorrect.

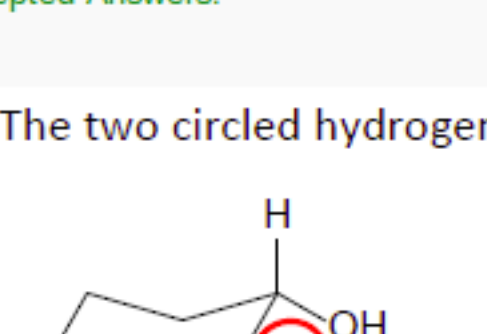
Score: 0

Accepted Answers: c.

c.

 7) The *pro*-R hydrogens in the following molecule are

1 point



- a. Ha and Hb
b. Ha and Hc
c. Hb and Hd
d. Hb and Hc

- a.
 b.
 c.
 d.

No, the answer is incorrect.

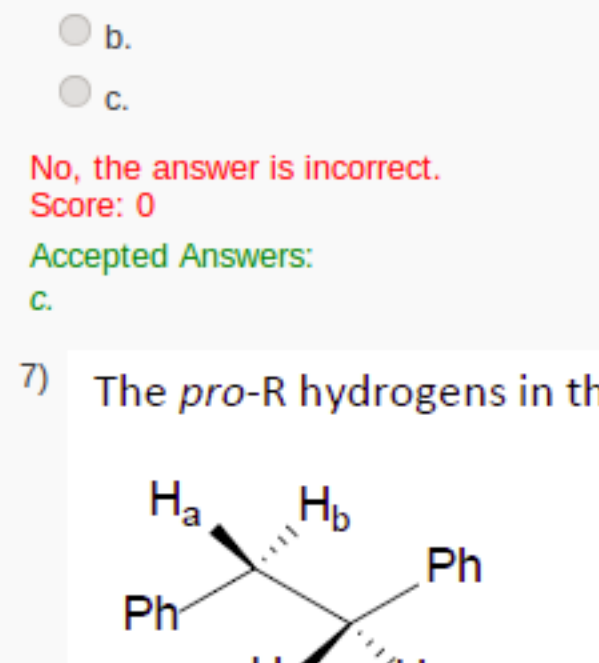
Score: 0

Accepted Answers: c.

c.

 8) The relative configuration of the following molecule as per *syn*/*anti* nomenclature is

1 point



- a. 2,3-*anti*-3,4-*anti*
b. 2,3-*anti*-3,4-*syn*
c. 2,3-*syn*-3,4-*anti*
d. 2,3-*syn*-3,4-*syn*

- a.
 b.
 c.
 d.

No, the answer is incorrect.

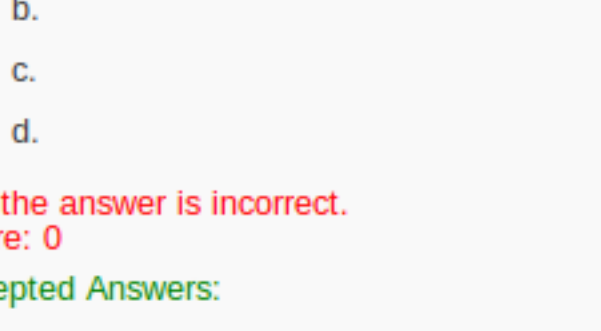
Score: 0

Accepted Answers: a.

a.

 9) The stereochemical descriptors of the β -face of the structures **A** and **B** are

1 point



- a. *re* and *si* respectively
b. both *re*
c. both *si*
d. *si* and *re* respectively

- a.
 b.
 c.
 d.

No, the answer is incorrect.

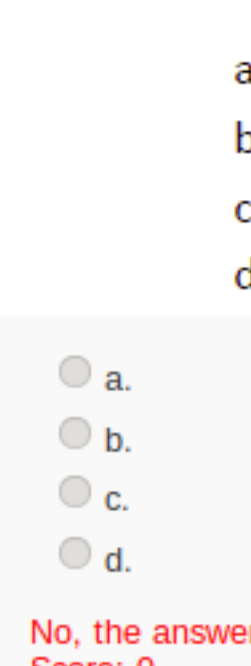
Score: 0

Accepted Answers: a.

a.

 10) During reduction with NaBH_4 , the addition of hydride from the *re* face of the molecule **A** gives rise to

1 point



- a. *s*-alcohol
b. *r*-alcohol
c. optically active alcohol

- a.
 b.
 c.

No, the answer is incorrect.

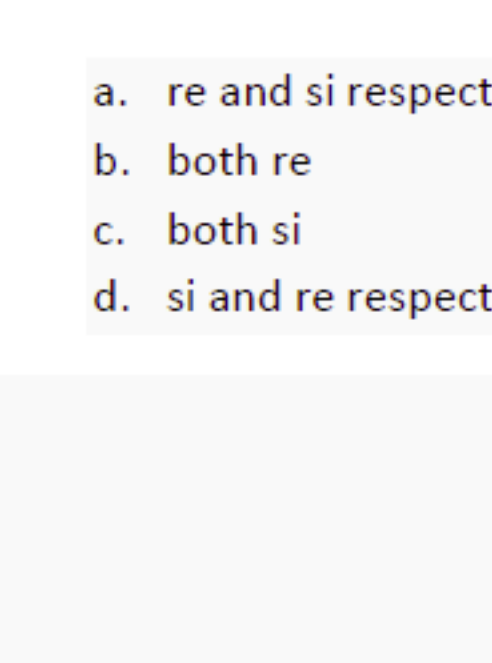
Score: 0

Accepted Answers: a.

a.

11) Which of the following molecules can be isolated in an optically active form under normal condition

1 point



- a.
 b.
 c.
 d.

No, the answer is incorrect.

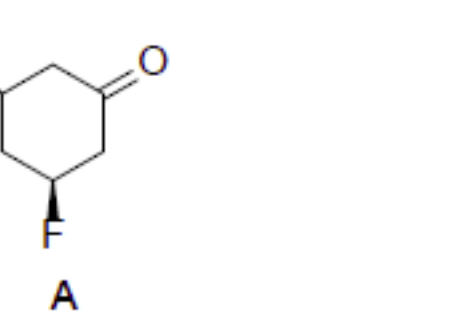
Score: 0

Accepted Answers: b.

b.

12) The absolute configuration of C1 in the following molecule is R

1 point



- a. True
b. False

- a.
 b.

No, the answer is incorrect.

Score: 0

Accepted Answers: b.

b.