

Unit 9 - Week 7

Course outline

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- Lecture 29 : Conformation and Reactivity
- Lecture 30 : Conformation and Reactivity (Contd.)
- Lecture 31 : Conformation and Reactivity (Contd.)
- Lecture 32 : Stereoelectronic Effects
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- Lecture 34 : Substitution and Elimination in Cyclohexane Systems

Quiz : Assignment 7

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Assignment Solution

Assignment 7

The due date for submitting this assignment has passed. **Due on 2019-09-18, 23:59 IST.**
As per our records you have not submitted this assignment.

1) The NaBH₄ reduction of 4-t-butyl cyclohexan-1-one gives 1 point

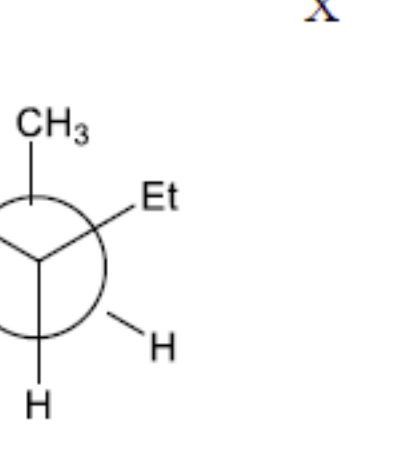
- a) Two products which are enantiomers
- b) Two products which are diastereomers
- c) Only one product

- a)
- b)
- c)

No, the answer is incorrect.
Score: 0

Accepted Answers:
b)

2) Which of the following is the major product when molecule X is reacted with EtMgBr followed by usual workup? 0 points



- a) CC(O)C(C)C1=CC=CC=C1
- b) CC(O)C(C)C1=CC=CC=C1
- c) CC(O)C(C)C1=CC=CC=C1
- d) CC(O)C(C)C1=CC=CC=C1

- a)
- b)
- c)
- d)

No, the answer is incorrect.
Score: 0

Accepted Answers:
a)

3) Which of the following has fastest rate of oxidation with chromic acid? 1 point

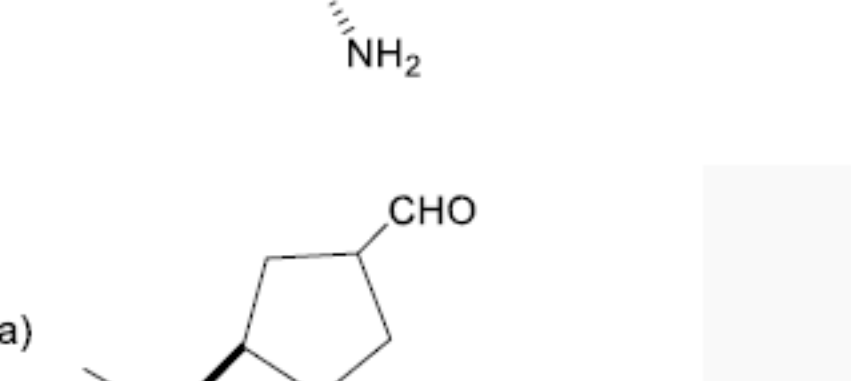
- a) CC(C)C1=CC=CC=C1O
- b) CC(C)C1=CC=CC=C1O
- c) CC(C)C1=CC=CC=C1O

- a)
- b)
- c)

No, the answer is incorrect.
Score: 0

Accepted Answers:
b)

4) The major product obtained in the following reaction is 1 point



- a) CC(C)C1=CC=CC=C1C=O
- b) CC(C)C1=CC=CC=C1N
- c) CC(C)C1=CC=CC=C1C=O
- d) C1=CC=CC=C1

- a)
- b)
- c)
- d)

No, the answer is incorrect.
Score: 0

Accepted Answers:
c)

5) The compound that undergoes slowest rate of dehydrobromination when treated with NaOEt amongst the following is 1 point



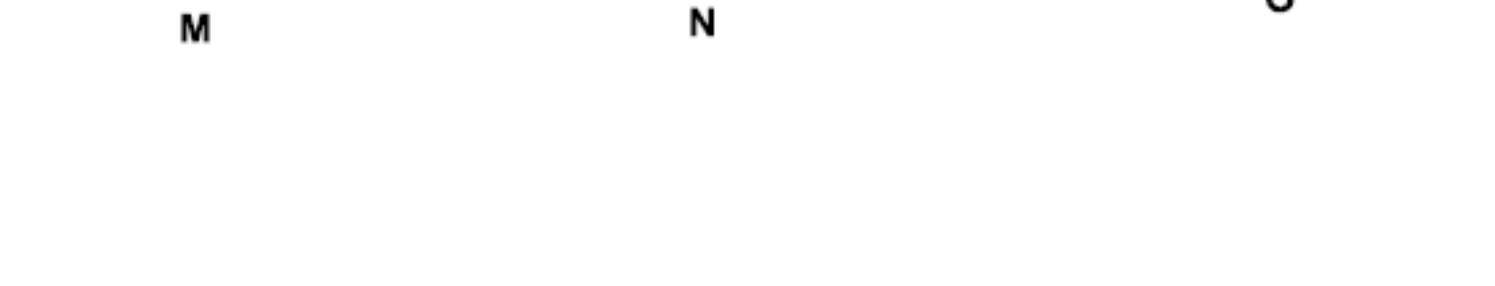
- a) I
- b) II
- c) III

- a)
- b)
- c)

No, the answer is incorrect.
Score: 0

Accepted Answers:
b)

6) Which of the following undergoes fastest rate of saponification? 1 point



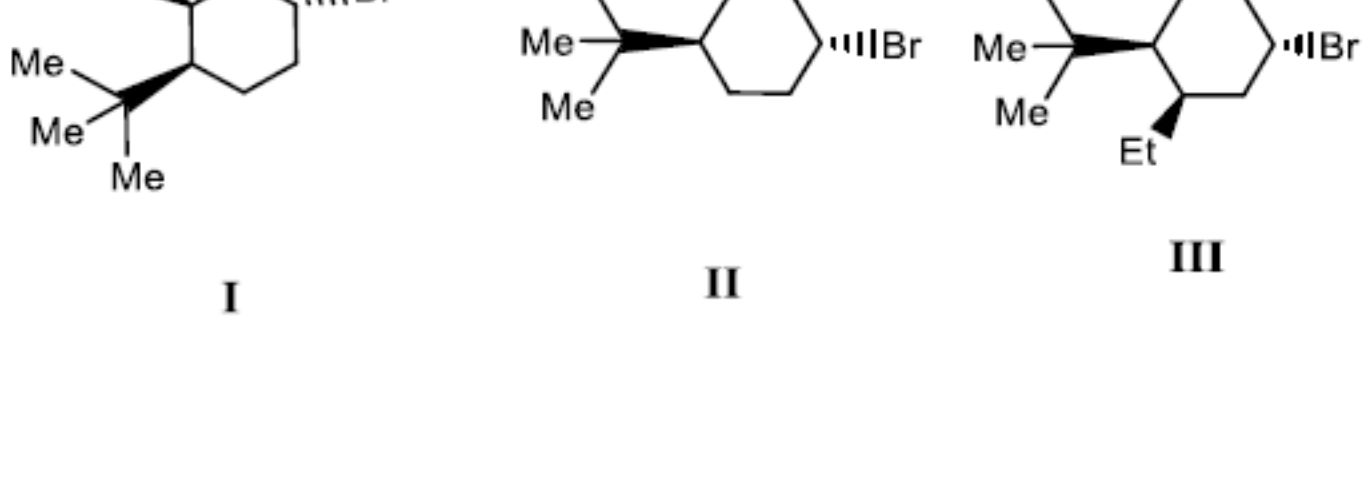
- a. M
- b. N
- c. O

- a.
- b.
- c.

No, the answer is incorrect.
Score: 0

Accepted Answers:
b.

7) Which of the following molecules will undergo fastest S_N2 reaction when treated with NaOEt? 1 point



- a) I
- b) II
- c) III

- a)
- b)
- c)

No, the answer is incorrect.
Score: 0

Accepted Answers:
b)

8) The reaction of R-2-bromo propanoic acid with aqueous alkali gives R-2-hydroxy propanoic acid. 1 point

- a) True
- b) False

- a)
- b)

No, the answer is incorrect.
Score: 0

Accepted Answers:
a)

9) In any S_N2 reaction, R-molecule is always converted to S molecule because of inversion 1 point

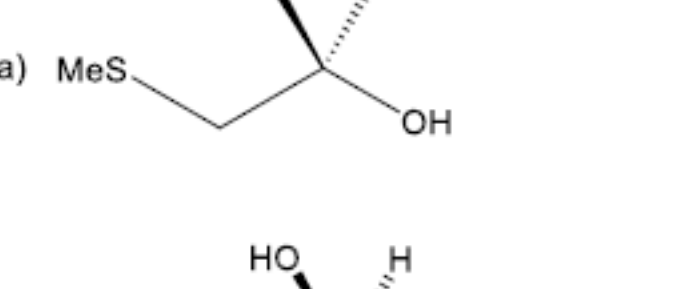
- a) True
- b) False

- a)
- b)

No, the answer is incorrect.
Score: 0

Accepted Answers:
b)

10) The following compound undergoes S_N2 reaction with aq NaOH. The major product obtained will be 1 point



- a) CCSCC[C@@H](C)O
- b) CCSCC[C@H](C)O
- c) CCSCC[C@@H](C)O

- a)
- b)
- c)

No, the answer is incorrect.
Score: 0

Accepted Answers:
c)

11) Amongst the following molecules which one will react fastest with MeI to provide its quaternary salt? 1 point



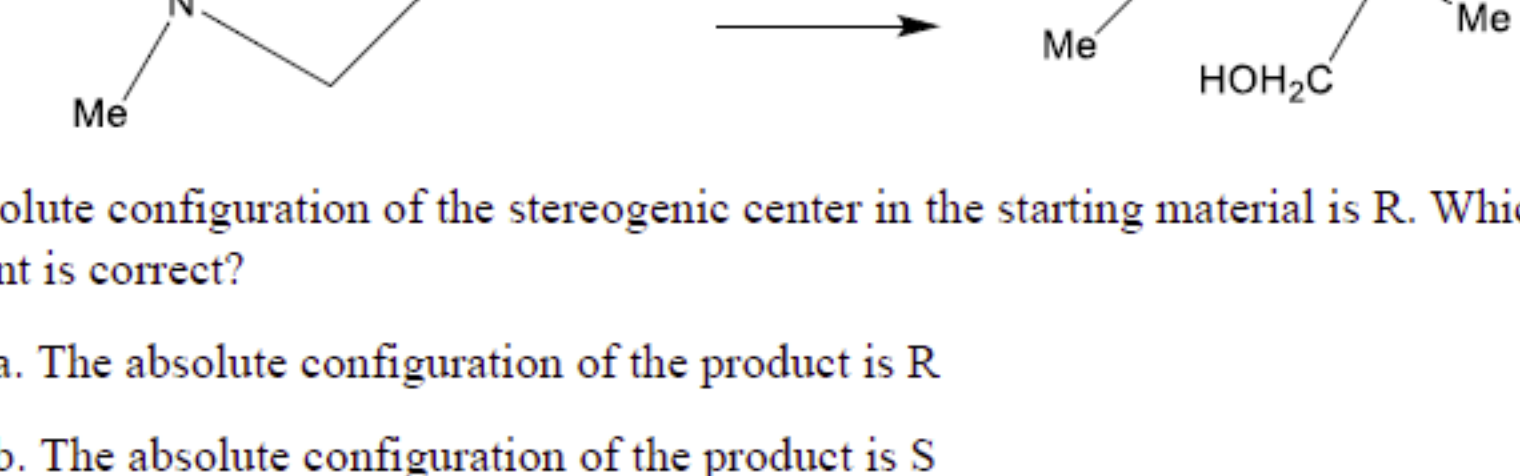
- a. I
- b. II
- c. III

- a.
- b.
- c.

No, the answer is incorrect.
Score: 0

Accepted Answers:
b.

12) Consider the following reaction: 1 point



The absolute configuration of the stereogenic center in the starting material is R. Which statement is correct?

- a. The absolute configuration of the product is R
- b. The absolute configuration of the product is S
- c. The product will be racemic mixture.

- a.
- b.
- c.

No, the answer is incorrect.
Score: 0

Accepted Answers:
b.