Week 7 Assignment 7

The due date for submitting this assignment has passed. **Due on 2018-03-14, 23:59 IST.**

Submitted assignment

The following questions are based on retrosynthetic disconnection. In each question, a single step retro is shown. Identify the required transformation (key reaction) which can be used to carry out the forward synthesis (only one correct answer).

1) Which is the correct retrosynthetic pathway for the following molecule

- (a) 
- (b) 
- (c) 
- (d) None

No, the answer is incorrect.

Score: 0

Accepted Answers:

1. Birch
2. mCPBA

2) Which is the correct retrosynthetic pathway for the following molecule

- (a) 
- (b) 
- (c) 
- (d) None

Score: 0

Accepted Answers:
3) The following species is best known as

- A. a1 species
- B. d1 umpolung
- C. d2 species
- D. a2 species

No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
B. d1 umpolung

4) Which is the correct retro synthetic pathway for the following molecule
5) Which is the correct retrosynthetic pathway for the following molecule?

(a) \( \text{H} \rightarrow \text{OH} \)

(b) \( \text{mCPBA} \rightarrow \text{H}_2\text{O}^+ \)

(c) \( \text{hydroboration oxidation} \)

(d) \( \text{OsO}_4 \)

(e) \( \text{KMnO}_4 \)

No, the answer is incorrect.
Score: 0
Accepted Answers: (b)

6) The following retrosynthesis as shown can be achieved by applying

(a) A. Hoffmann rearrangement

(b) B. Beckmann rearrangement

(c) C. Claisen rearrangement

(d) D. None

No, the answer is incorrect.
Score: 0
Accepted Answers: A. Hoffmann rearrangement
7) For the following retro synthetic pathway

Which statement is correct?

\[ \text{Base} \quad X + Y \]

\[ X = \quad Y = \]

(a) \[ \text{S} \quad \text{S} \quad \text{Br} \quad \text{Br} \]

(b) \[ \text{S} \quad \text{S} \quad \text{Br} \quad \text{Br} \]

(c) \[ \text{S} \quad \text{S} \quad \text{Br} \quad \text{Br} \]

(d) \[ \text{S} \quad \text{S} \quad \text{Br} \quad \text{O} \]

No, the answer is incorrect.
Score: 0
Accepted Answers:
(a)

8) For the following retro synthesis route

Choose the correct statement

- A. Ozonolysis followed by Aldol
- B. Aldol followed by Ozonolysis
- C. Ozonolysis followed by Cannizzaro reaction
- D. Di-hydroxylation followed by Aldol

No, the answer is incorrect.
Score: 0
Accepted Answers:
A. Ozonolysis followed by Aldol

9) Which is the correct retrosynthetic pathway for the following molecule

(a) \[ \text{OH} \quad \text{N}_3 \quad \text{HN}_3 \]

(b) \[ \text{NaN}_3 \]

(c) None
10. The following transformation can be achieved by which of the following route?

(a) Base, nitromethane and Nef reaction  
(b) Base; formaldehyde 1,3-dithiane; Hg2+  
(c) HCN, DIBAL-H  
(d) All of these  

No, the answer is incorrect.
Score: 0
Accepted Answers:  
D. All of these