Exam 3 Preview - Part 1 Oxidation & Reduction Reactions, 20 points

- Due Nov 14, 2024 at 11:59pm
- Points 20
- Questions 10
- Available Oct 20, 2024 at 12am - Nov 14, 2024 at 11:59pm
- Time Limit None
- Allowed Attempts 3

Instructions

The Exam 3 Preview assignments are mandatory for all students. Part 1 is due on 10/31 at 11:59 PM.

This assignment presents practice fill-in-the-box type problems and emphasizes content related to Epoxides, Oxidation, and Reduction reactions. It contains 10 questions, and is worth 20 points. There is no time limit for the activity, and you have 2 submission attempts. You may save your work and return to the problem set at a later time. Canvas should indicate to you which answers were incorrect after each submission. The highest of the two scores will be recorded in the gradebook. Note that credit is only given for fully correct answers for multiple-choice and choose-all-that-apply type questions.

It is strongly recommended that you treat your first attempt like a practice test to evaluate where you stand with the material. After you have completed your first attempt, you are welcome to work with other students or discuss the problems at help sessions.

Do not wait until the last minute to being working through this assignment. Some of the problems can be quite challenging. Leave time before the deadline to attend a help session to clarify any questions that are giving you trouble so you can maximize the points earned.

This quiz was locked Nov 14, 2024 at 11:59pm.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	1,483 minutes	20 out of 20

ⓘ Correct answers are hidden.

Score for this attempt: 20 out of 20
Submitted Oct 29, 2024 at 10:58am
This attempt took 1,483 minutes.

Question 1

2 / 2 pts

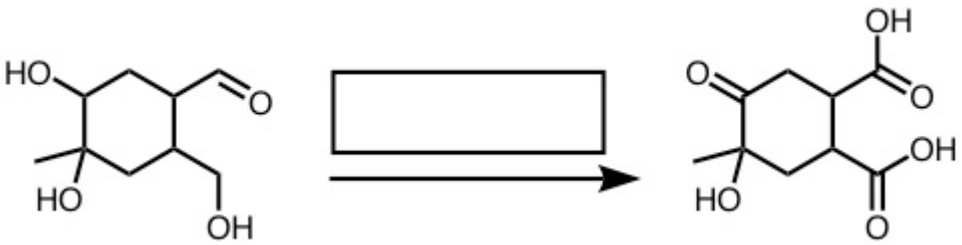
Recall that organometallic reagent nucleophiles are also strong bases. Which of the following solvents are **inert** (ie. will not react) with strong bases? Choose all that apply.

- [x] THF
- [ ] Water
- [x] Diethyl ether
- [ ] Methanol

Question 2

2 / 2 pts

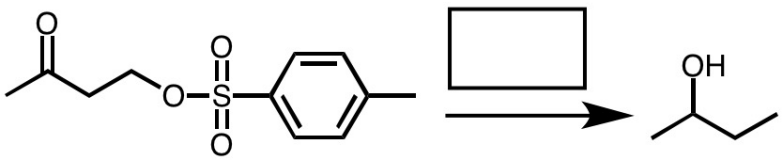
For problems 2-10, complete the reactions by **filling the boxes** with the necessary chemical reagent(s)/reaction conditions or major products. Provide reagent(s)/reaction conditions that would produce the major product most efficiently. **Assume aqueous workups** are performed if needed.



- ○ HBr
- ○ CrO_3, HCl, pyridine
- ○ H_2SO_4
- ○ $LiAlH_4$
- ○ $NaBH_4$
- ◉ CrO_3, H_2O, H_2SO_4
- ○ H_2O
- ○ NaOH
- ○ Ag_2O, H_2O, NH_4OH

Question 3

2 / 2 pts

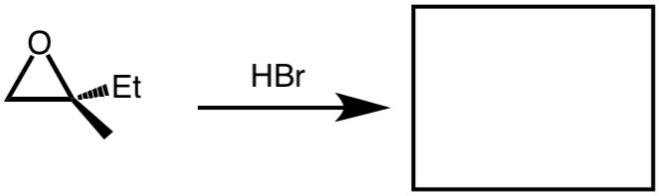


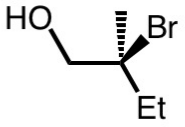
- ○ NaOH
- ○ $NaBH_4$
- ○ NaH

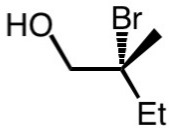
- BrH_4
- $LiAlH_4$
- H_2SO_4
- CrO_3, H_2O, H_2SO_4
- CrO_3, HCl, pyridine
- Ag_2O, H_2O, NH_4OH

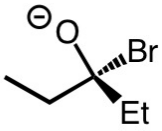
Question 4

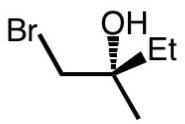
2 / 2 pts

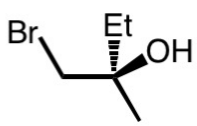


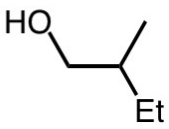
I) 

II) 

III) 

IV) 

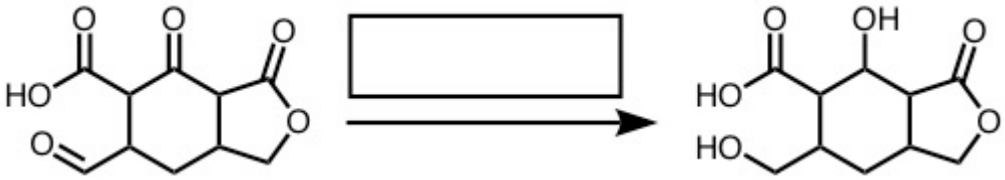
V) 

VI) 

- I
- II
- III
- IV
- V
- VI

Question 5

2 / 2 pts

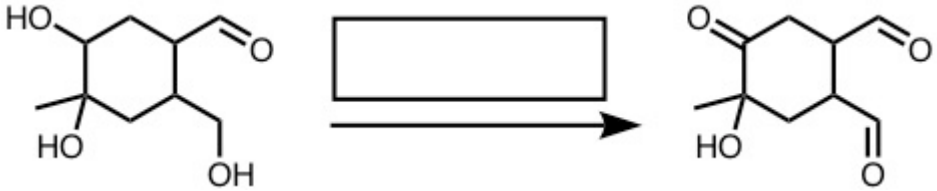


- $NaBH_4$
- $LiAlH_4$
- NaOH
- CrO_3, H_2O, H_2SO_4

- CrO_3, HCl, pyridine
- NaH
- BrH_4
- Ph_3PO
- Ag_2O, H_2O, NH_4OH

Question 6

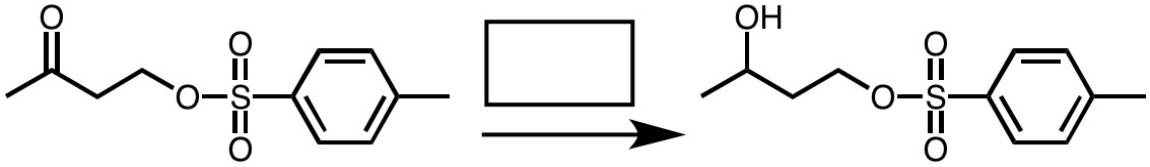
2 / 2 pts



- NaOH
- CrO_3, H_2O, H_2SO_4
- $LiAlH_4$
- $NaBH_4$
- Ph_3PBr_2
- H_2O
- Pyridine, TfOTf
- CrO_3, HCl, pyridine
- Ag_2O, H_2O, NH_4OH

Question 7

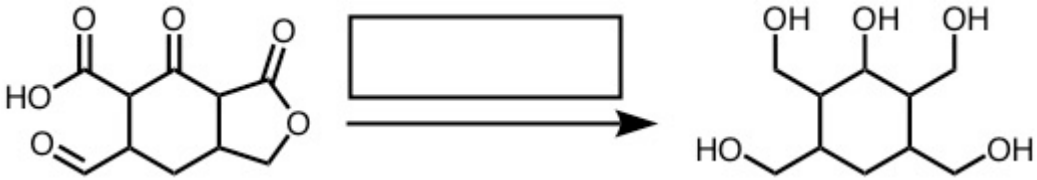
2 / 2 pts



- $NaBH_4$
- $LiAlH_4$
- NaOH
- CrO_3, H_2O, H_2SO_4
- CrO_3, HCl, pyridine
- NaH
- BrH_4
- Ph_3PO
- Ag_2O, H_2O, NH_4OH

Question 8

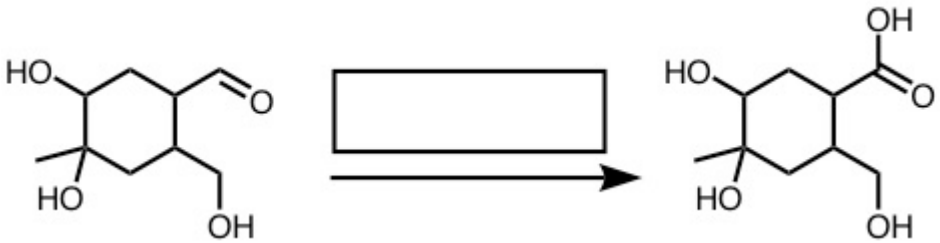
2 / 2 pts



- NaOH
- $NaBH_4$
- NaH
- BrH_4
- $LiAlH_4$
- H_2SO_4
- CrO_3, H_2O, H_2SO_4
- CrO_3, HCl, pyridine
- Ag_2O, H_2O, NH_4OH

Question 9

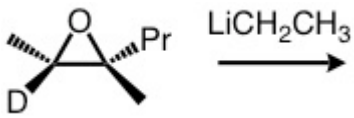
2 / 2 pts

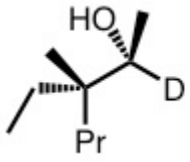


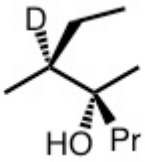
- NaOH
- CrO_3, H_2O, H_2SO_4
- $LiAlH_4$
- $NaBH_4$
- Ph_3PBr_2
- H_2O
- Pyridine, TfOTf
- CrO_3, HCl, pyridine
- Ag_2O, H_2O, NH_4OH

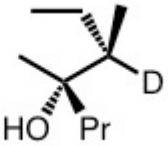
Question 10

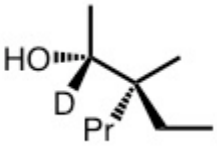
2 / 2 pts



i) 

ii) 

iii) 

iv) 

- i
- ii
- iii
- iv

Quiz Score: 20 out of 20