QUESTION 1

Give the product of the following reaction sequence with the starting material shown.

1. Excess LiAlH₄
2. H₃O⁺
3. Na₂Cr₂O₇/H₂SO₄/H₂O
4. NaOH
5. MeI (hint, SN₂ reaction)

QUESTION 2

Which is the WEAKEST Bronsted acid?
QUESTION 3

MC29t

Identify the following reaction as indicated (stereochemistry is ignored)

A :OH

Na$_2$Cr$_2$O$_7$/H$_2$SO$_4$/H$_2$O

A addition and neither oxidation or reduction
B elimination and neither oxidation or reduction
C addition and reduction
D elimination and oxidation

QUESTION 4

MC29u

give the product of the following reaction sequence

1. PBr$_3$
2. Na$^+$.C≡CH
3. Sia$_2$BH.THF
4. -OH/H$_2$O$_2$
5. Na$_2$Cr$_2$O$_7$/H$_2$SO$_4$/H$_2$O

A

B

C

D

A

B

C

D
QUESTION 5
MC29u
Give the reagents/conditions to perform the following reaction

H–C≡C–H \[??\] \rightarrow \text{OH}

A
1. NaNH₂
2. 
3. H₂O⁺

B
1. NaNH₂
2. 
3. H₂O⁺

C
1. NaNH₂
2. 
3. H₂O⁺

D
1. NaNH₂
2. 
3. H₂O⁺

QUESTION 6
MC29w
rank the following in order of INCREASING Bronsted acidity

I \[\text{H₂N–} \text{–OH}\]
II \[\text{H₃C–} \text{–OH}\]
III \[\text{CHO–} \text{–OH}\]
IV \[\text{H–} \text{–OH}\]

A III > IV > II > I
B IV > II > III > I
C IV > III > I > I
D I > II > IV > III
QUESTION 7
Which is the product of the following reaction sequence?

1. Br₂
2. Excess NaNH₂
3. HgSO₄/H₂SO₄/H₂O

A  B  C  D

QUESTION 8
Which are the best synthons for disconnection of the bond indicated by the dashed line?

A  B  C  D
QUESTION 9
There are NO INCORRECT answers to this question, ALL answers to this question will be considered correct for grading purposes
What overall final grade do you expect to earn in this class?
A
B
C
D

QUESTION 10
There are NO INCORRECT answers to this question, ALL answers to this question will be considered correct for grading purposes
How hard did you work on organic chemistry this week (not including watching/attending lectures)
A Very Hard
B Hard
C Somewhat Hard
D Not very Hard this week