QUESTION 1

What are the best reagents/conditions to perform the following simple synthesis?

A → B

1. NBS/hv 1. Br₂/hv
2. K⁺ −O−t−Bu 2. Na⁺ −OMe
4. Excess NaNH₂ 4. Excess NaNH₂
5. H₂O 5. H₂O
6. HgSO₄/H₂SO₄/H₂O 6. HgSO₄/H₂SO₄/H₂O

C

1. NBS/hv
2. Na⁺ −OMe
3. Br₂
4. Excess NaNH₂
5. H₂O
6. HgSO₄/H₂SO₄/H₂O

D

1. NBS/hv
2. K⁺ −O−t−Bu
3. 2 Equiv. HBr
4. Excess NaNH₂
5. H₂O
6. HgSO₄/H₂SO₄/H₂O
QUESTION 2

MC28s

Give the product of the following reaction

\[
\begin{align*}
\text{Na}^+ & \quad 1. \quad \Delta \\
\text{Ph-C≡C}^- & \quad \rightarrow \\
\text{???} & \quad 2. \quad \text{H}_3\text{O}^+ \\
\end{align*}
\]

A  Ph-C≡C-HO  
B  Ph-C≡C-OH  
C  Ph-C≡C-OH  
D  Ph-C≡C-OH

QUESTION 3

MC28y

Give the product of the following reaction

\[
\begin{align*}
\text{Na}^+ & \quad 1. \quad \text{O} \\
\text{C-C≡C}^- & \quad \rightarrow \\
\text{???} & \quad 2. \quad \text{H}_3\text{O}^+ \\
\end{align*}
\]

A  C-C≡C-HO  
B  C-C≡C-OH  
C  C-C≡C-OH  
D  C-C≡C-OH
**QUESTION 4**

Which will be the product of the following reaction sequence?

1. Br₂/CCl₄
2. Excess NaNH₂
3. H₂O
4. HgSO₄/H₂SO₄/H₂O

3-methylpent-1-ene →

A: B: C: D:

**QUESTION 5**

Which represents the best synthesis of Y from X?

A

1. Br₂/hv
2. HC≡C⁻ +Na
3. NBS/hv
4. HC≡C⁻ +Na
5. H₂/Pd/C

B

1. Br₂/hv
2. Na⁺ -OMe
3. HBr/ROOR
4. HC≡C⁻ +Na
5. Na/NH₃(l)

C

1. Br₂/hv
2. t-BuO⁻ +K
3. HBr/ROOR
4. HC≡C⁻ +Na
5. Na/NH₃(l)

D

1. Br₂/hv
2. t-BuO⁻ +K
3. NBS/hv
4. HC≡C⁻ +Na
5. H₂/Lindlar

X → Y
QUESTION 6

MC28o

Which of the following reactions will make the bond indicated by the dashed line?

A  

B  

C  

D  

QUESTION 7

Which is the correct IUPAC name for the following structure?

A. (2R)-bromo-(3R)-methyloct-(5Z)-en-7-yne
B. (7S)-bromo-(6S)-methyloct-(3Z)-en-1-yne
C. (2S)-bromo-(3S)-methyloct-(5E)-en-7-yne
D. (7R)-bromo-(6R)-methyloct-(3Z)-en-1-yne
QUESTION 8
MC26k
Which is the product of reaction of (3R)-bromo-(3,4S)-dimethylhexane with sodium methoxide in a polar aprotic solvent?

A  (E)-3,(4S)-dimethyl-2-hexene
B  (Z)-3,(4S)-dimethyl-2-hexene
C  (E)-3,4-dimethyl-3-hexene
D  (Z)-3,4-dimethyl-3-hexene

QUESTION 9
There are NO INCORRECT answers to this question, ALL answers to this question will be considered correct for grading purposes
I study hard to learn organic chemistry.

A  Never
B  Rarely
C  Sometimes
D  Often
E  Always

QUESTION 10
There are NO INCORRECT answers to this question, ALL answers to this question will be considered correct for grading purposes
I spend a lot of time learning organic chemistry.

A  Never
B  Rarely
C  Sometimes
D  Often
E  Always
QUESTION 11
There are NO INCORRECT answers to this question, ALL answers to this question will be considered correct for grading purposes.
I put enough effort into learning organic chemistry.

A   Never 
B   Rarely 
C   Sometimes 
D   Often 
E   Always 

QUESTION 12
There are NO INCORRECT answers to this question, ALL answers to this question will be considered correct for grading purposes.
I use strategies to learn organic chemistry well.

A   Never 
B   Rarely 
C   Sometimes 
D   Often 
E   Always 

QUESTION 13
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 really need in this class (note that the question asks about the grade that you need, not the grade you want, these two may not be the same!)?
A
B
C
D
QUESTION 14
There are NO INCORRECT answers to this question, ALL answers to this question will be considered correct for grading purposes.
As of today, what final grade would you be realistically willing to accept in this course

A
B
C
D