CHM 233 : Fall 2018
Quiz #13
Question 1
Which best describes the product(s) of the following reaction?

\[
\text{CH}_2 = \text{CH}_2 + \text{H}_2 \xrightarrow{\text{Pd/C}} \text{CH}_3 - \text{CH}_2 - \text{CH}_3 + \text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{CH}_3
\]

A
B
C
D

Question 2
Which would be expected to be the major product of the following reaction?

\[
\text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{CH}_3 + \text{Br}_2 \xrightarrow{\text{hv}} \text{??}
\]

A
B
C
D

Question 3
Which are the best reagents/conditions to perform the following transformation?

\[
\text{CH}_3 - \text{CH}_2 - \text{CH}_3 \xrightarrow{???} \text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{Br}
\]

A  \text{Br}_2/\text{CCl}_4
B  \text{Br}_2/\text{hv}
C  \text{NBS/hv}
D  \text{Br}_2/\text{EtOH}
Question 4
MCalkenesIIf
Which is the expected major organic product of the following reaction

\[ \text{HBr} \xrightarrow{t-\text{BuO-Ot-Bu}} \]

A B C D

Br Br Br Br
OtBu OtBu OtBu OtBu

Question 5
MCalkenesId
Which is the expected major organic product of the following reaction

\[ \text{H}_2\text{O} \xrightarrow{\text{HCl (cat.)}} \]

A B C D

OH Cl Cl HO

Question 6
MCalkenesIv
Which represents the best reagents/conditions SEQUENCE to perform the following transformation? (ignore stereochemistry)

\[ \text{Br} \]

A 1. \text{H}_2/\text{Pd/C} \\
   2. \text{NBS/hv} \\
B 1. \text{H}_2/\text{Pd/C} \\
   2. \text{Br}_2/\text{hv} \\
C 1. \text{NBS/hv} \\
   2. \text{H}_2/\text{Pd/C} \\
D 1. \text{Br}_2/\text{hv} \\
   2. \text{H}_2/\text{Pd/C}
**Question 7**

MCalkenesIh

Which is the expected major organic product of the following reaction

\[
\begin{align*}
\text{Br}_2 & \quad \text{EtOH (solvent)} \\
\text{???} & \quad \text{???}
\end{align*}
\]

A  
B  
C  
D  

**Question 8**

MC20n

Here is an Bronsted/Lewis acid base reaction called an E2 elimination. It occurs with a concerted single step mechanism, i.e. all of the bonds are made and broken in one step. This mechanism will be discussed in detail later in the course. How many partial bonds are there in the transition state for this reaction? (hint, do the curved arrow-pushing that describes bond breaking/making, OR, draw the transition state)

\[
\begin{align*}
\text{H-O:} & + \quad \text{H-C\text{CH}_3} \\
\text{H} & \quad \text{H} \\
\text{Br:} & \quad \text{Br:}
\end{align*}
\]

A 1 partial bond  
B 2 partial bonds  
C 3 partial bonds  
D 4 partial bonds
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  