CHEM 2325 Exam 1 Name:

September 24, 2019 UTEP ID #:

If required, the Exam 1 retake homework will be due Friday, September 27, before 5 pm through <http://organic.utep.edu/quiz>, no exceptions or excuses. Put your name on these sheets so that you can recover your class answers. Expect an email from me this evening. ***Put your name and ID on your scantron and exam sheets. Show your picture ID as you turn everything in.***

Assume any necessary workup at the end or between the steps of the following reaction(s).

1.  D is deuterium, an isotope of hydrogen.

a.  b.  c. both a. and b. d. no reaction e. not a.-d.

1. 

a.  b.  c.  d.  e. not a.-d.

1. 

a.  b.  c.  d.  e. not a.-d.

1. 

a.  b.  c.  d.  e. not a.-d.

1. The product of butan-2-ol and pyridinium chlorochromate (PCC) in dichloromethane is?

a. butanal b. butanoic acid c. butanone d. no reaction e. not a.-d.

1. 

a.  b.  c.  d.  e. not a.-d.

1. Which compound will give off the most heat of combustion (when burned)?

a.  b.  c.  d.  e. 

1. Name the following compound.  a. (*E*)-4-propynyloct-3-ene

b. (*E*)-4-butylhept-4-en-2-yne c. (*Z*)-4-propynyloct-3-ene d. (*Z*)-4-butylhept-4-en-2-yne e. not a.-d.

9.-13. Match each reaction sequence to a product on the right. Chiral products are racemic.

1.  a. 
2.  b. 
3.  c. 
4.  d. 
5.  e. not a.-d.

14.-18. Match each reaction sequence to a product on the right. Chiral products are racemic.

1.  a. 
2.  b. 
3.  c. 
4.  d. 
5.  e. not a.-d.
6. Ozonolysis (O3/Zn) of (*Z*)-3-methylhex-3-ene makes which ketone?

a. butanone b. 3-methylbutanone c. pentan-2-one d. pentan-3-one e. not a.-d.

1.  Chiral products are racemic.

a.  b.  c.  d.  e. not a.-d.