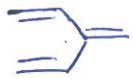
Philadelphia University
Faculty Of Science
Department Of Biotechnology and Genetic Engineering
Second semester 2015-2016
Organic Chemistry 0212243
SECOND EXAM

Time: 60 min. **Date:22/8/2016**

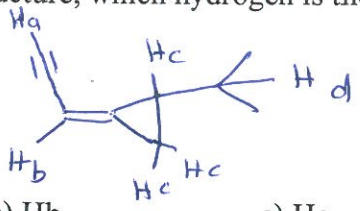
Name :..... **Student No.:** .....

Question 1 : Circle the correct answer in each of the following :

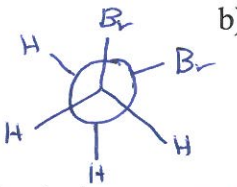
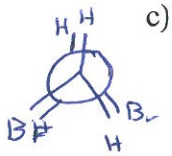
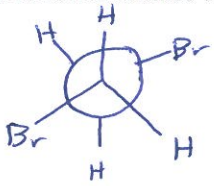
1. What type of carbcation will form from the addition of a H+ to 1-methylcyclopentene
   a) Methylene b) 1° c) 2° d) 3°

2. Which of the following is conjugated alkene
   a)  b)  c)  d) 

3. In the following structure, which hydrogen is the most acidic :

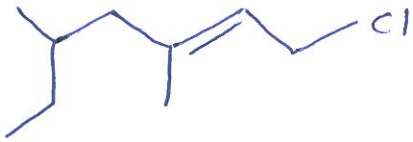


   a) Ha b) Hb c) Hc d) Hd

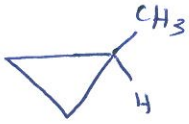
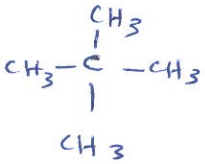
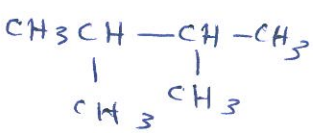
4. The most stable conformation of 1,2-Dibromoethane is :
   a)  b)  c)  d) none

5. What is the correct IUPAC name of :

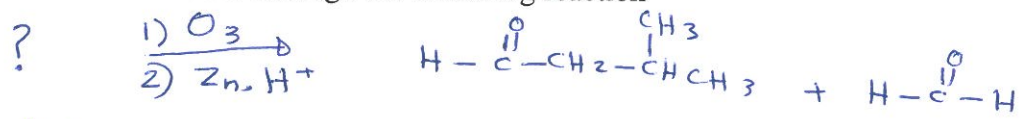
   a) 1-Chloro-5ethyl-3-methyl-2-hexene
   b) 7-Chloro-3,5-dimethyl-5-heptene
   c) 6-Chloro-2-ethyl-4-methyl-4-hexene
   d) 1-Chloro-3,5-dimethyl-2-heptene

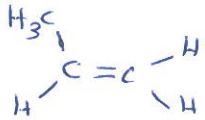


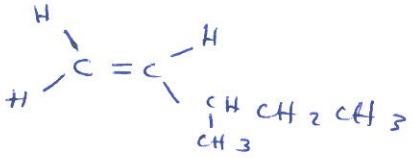
6. Which compound among the following will give two monochloro products upon reaction with Cl_2/UV light

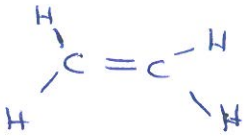
   a)  b)  c) CH_4 d) 

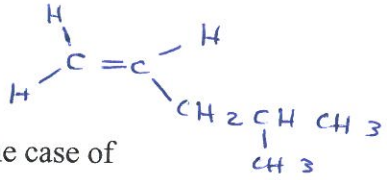
7. Which alkene would undergo the following reaction



a) 

b) 

c) 

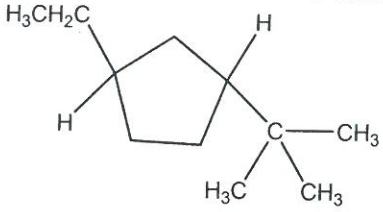
d) 

8. Cis-trans isomerism is possible only in the case of

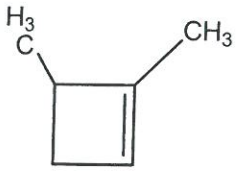
a) $H_2C{=}{=}Cl_2$ b) $H_2C{=}{=}CHCl$

c) $ClHC{=}{=}CHCl$ d) $Cl_2C{=}{=}CHCl$

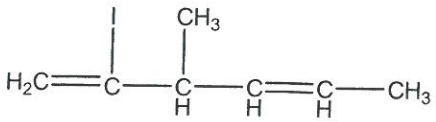
Question 2 : Give The IUPAC name of each of the following :



1. .....

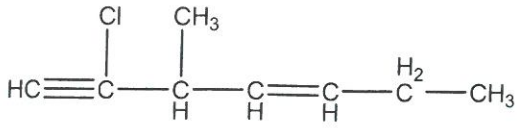


2. .....



3. .....

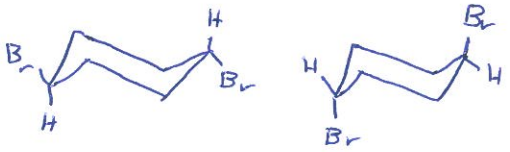
4. .....



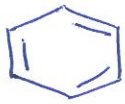
5. .....

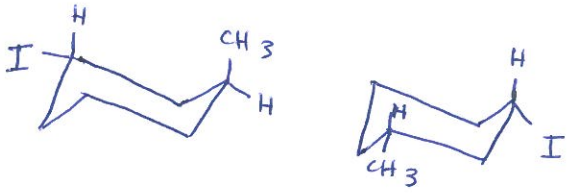
Question 3: Classify the following pair of structures as constitutional Diasteriomers, Conformers , identical, not isomer

a.  .....

b.  .....

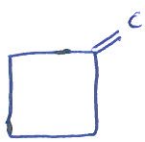
c.  .....

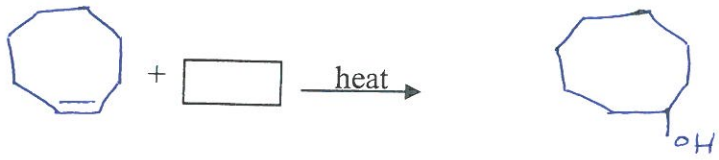
d. $CH_3CH_2CH_3$  .....

e.  .....

Question 4 : complete the following reaction :

1.  $+ Br_2$ $\xrightarrow{CCl_4}$

2.  $+ H_2O$ $\xrightarrow{H_2SO_4}$

3. 

4. $CH_2=CH-CH=CH_2 + Br_2 \longrightarrow$ +

5. $CH_3-C\equiv C-CH_3 + H_2 \xrightarrow{Pd}$

Good Luck