

Organic II Quiz #1 Ch 13-16 (20 questions for 20 points).

NAME: _____

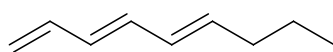
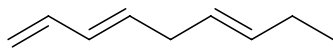
(1-10) are True or False.

- 1) A heterocyclic compound must contain a ring atom that is not carbon.
- 2) Normal ethers are unreactive to bases.
- 3) Meta substitution means a 1,3 arrangement on a benzene ring.
- 4) Kinetic products are always more stable than thermodynamic products.

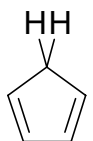
5)

$\text{H}_2\text{C}=\text{C}=\text{CHCH}_3$ is more stable than $\text{H}_3\text{C}-\text{C}\equiv\text{C}-\text{CH}_3$

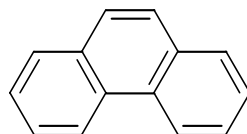
6)

 is more stable than 

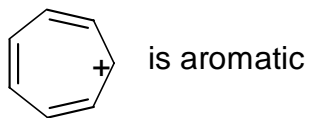
7)

 is aromatic

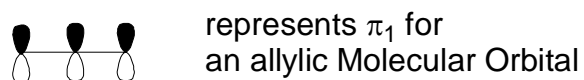
8)

 is aromatic

9)

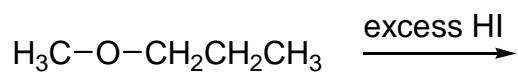


10)

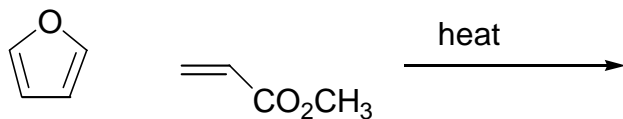


11-15) Give the products for the following reactions (and indicate stereo/regiochemistry where applicable).

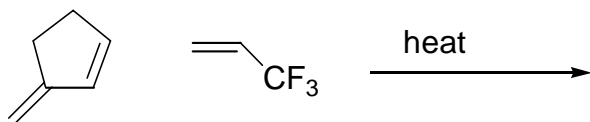
11)



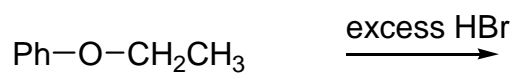
12)



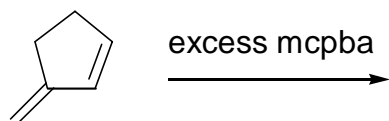
13)



14)



15)

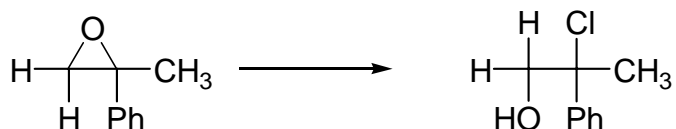


16-20) Give reagents and conditions for the following transformations.

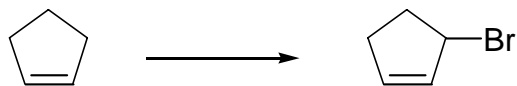
16)



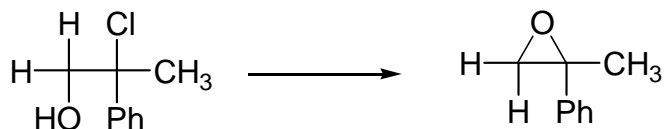
17)



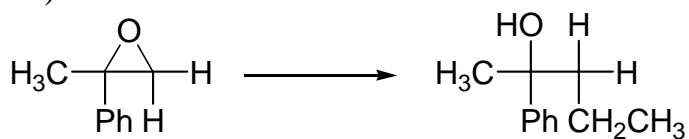
18)



19)



20)



BONUS QUESTION for 1 extra point

Draw the correct Lewis structure (& lone pairs) for mcpba.

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NAME:

BESS-STAR TWERKIN

(1-10) are True or False.

1) A heterocyclic compound must contain a ring atom that is not carbon. T

2) Normal ethers are unreactive to bases. T

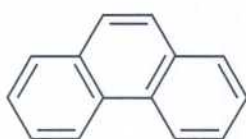
3) Meta substitution means a 1,3 arrangement on a benzene ring. T

4) Kinetic products are always more stable than thermodynamic products. F

5) $\text{H}_2\text{C}=\text{C}=\text{CHCH}_3$ is more stable than $\text{H}_3\text{C}-\text{C}\equiv\text{C}-\text{CH}_3$ F

6)  is more stable than  T

7)  is aromatic F

8)  is aromatic T

9)



is aromatic

T

10)

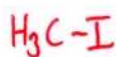
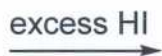
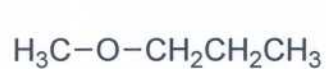


represents π_1 for
an allylic Molecular Orbital

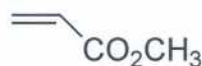
T

11-15) Give the products for the following reactions (and indicate stereo/regiochemistry where applicable).

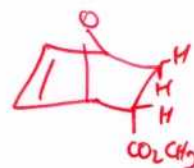
11)



12)

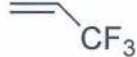
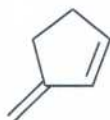


heat



ENDO

13)

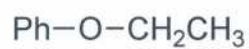


heat



N.R.

14)



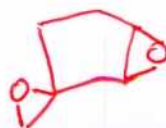
$\xrightarrow{\text{excess HBr}}$



15)



$\xrightarrow{\text{excess mcpba}}$



16-20) Give reagents and conditions for the following transformations.

16)



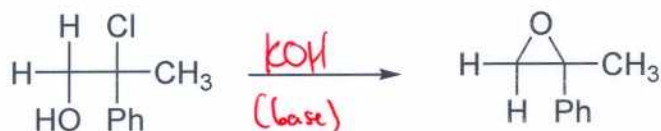
17)



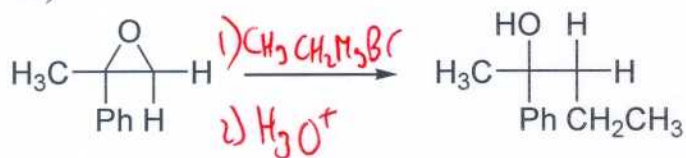
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