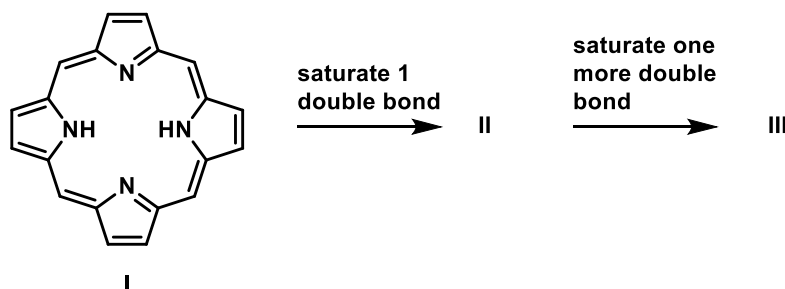


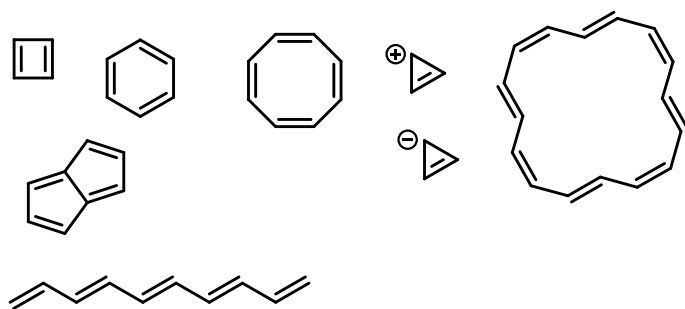
Homework 6 – 2017/05/08

1) a) Compound **I** (= a porphyrin) is an aromatic compound. Explain why.

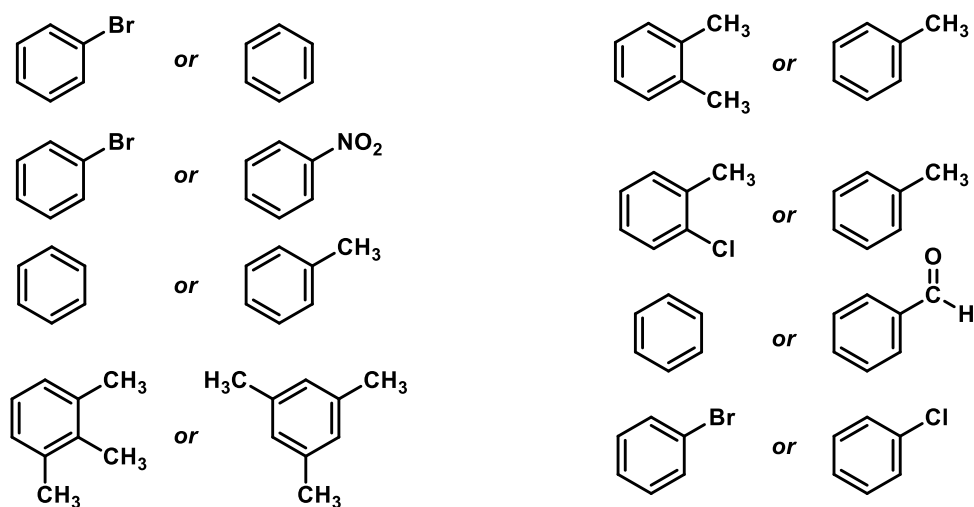
b) Take away first one (**II**), then a second (**II**) double bond (i.e. replace a CH=CH unit with CH₂-CH₂) while retaining the aromaticity! Explain why **II** and **III** are aromatic!



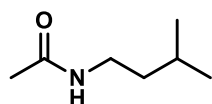
2) Which ones are aromatic, and why?



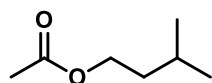
3) Which one of the pairs would you expect to react faster in an electrophilic aromatic substitution, and why?



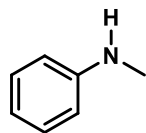
4) Suggest starting materials and reaction conditions for the synthesis of these compounds:



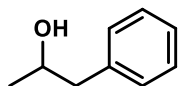
give at least two different solutions



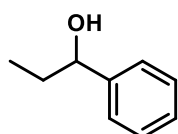
give at least two different solutions



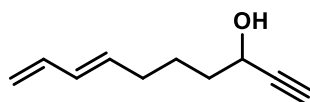
give at least two different solutions



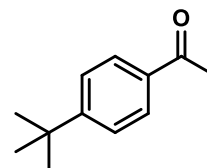
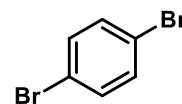
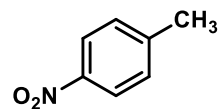
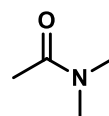
give at least three different solutions



give at least three different solutions



give at least two different solutions



Solutions can be handed in to Daniel Kovacs or to me in person, or you can mail them to eszter.borbas@kemi.uu.se

As long as you attempt to answer at least one question you will get feedback.

/Eszter

