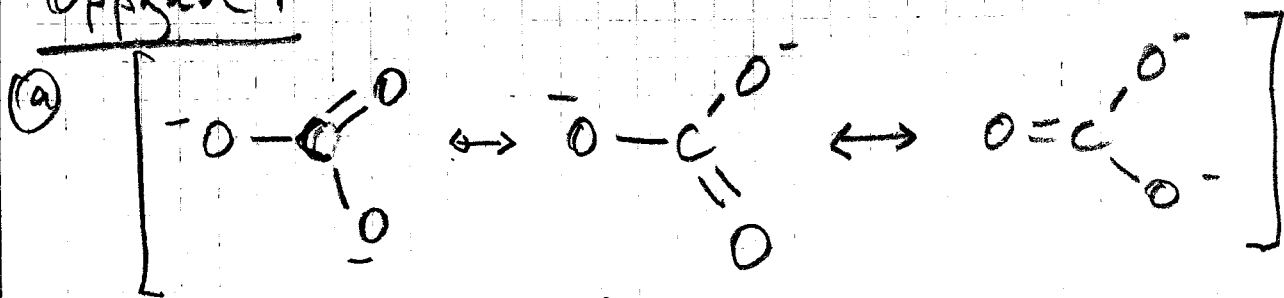
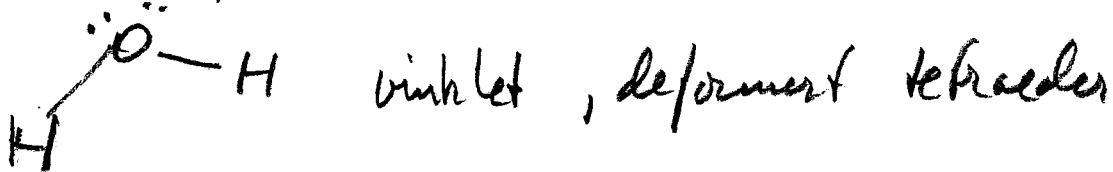


Oppgave 1



Bindingsorden: $\frac{4}{3}$

(b) H_2O : 2 bindende, 2 ikke-bindende elektron par

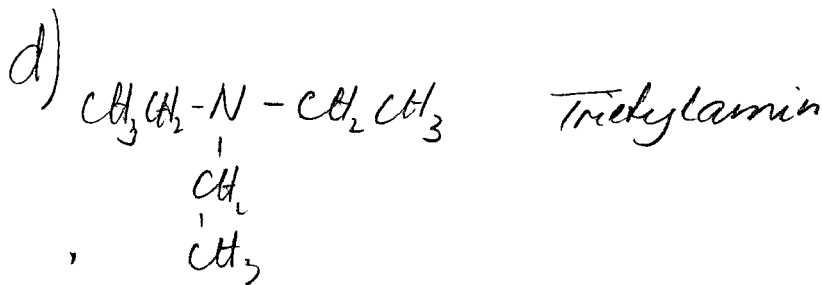
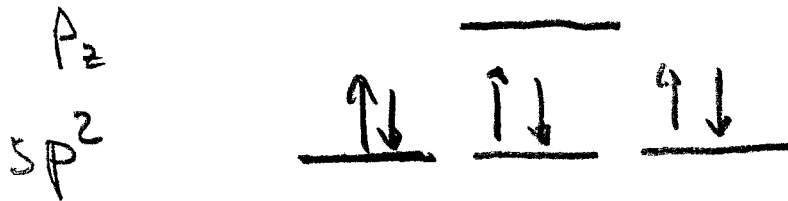
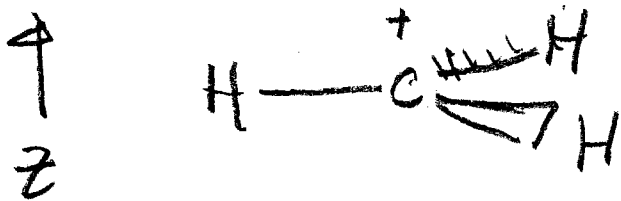


BrF_3 : 3 bindende, 2 ikke-bindende, deformert trigonal bipyramid

NH_4^+ : 4 bindende, tetraedisk ^{perfekt}

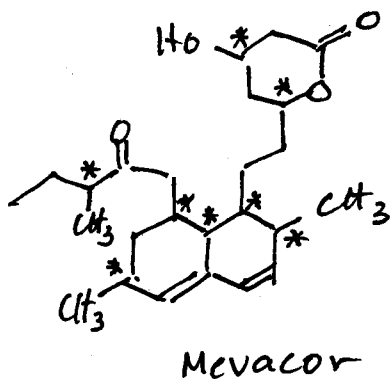
PCl_4^+ : 5 bindende, perfekt trigonal bipyramid

c) sp^2 + ett ledig p-orbital



Oppgave 2

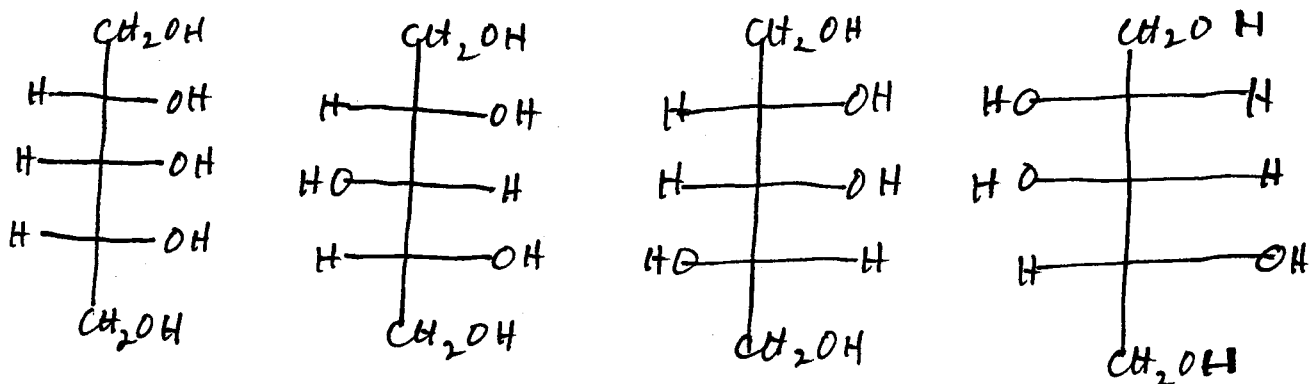
a)



b)

- i) Konstitutionsisomerer
- ii) enantiomerer
- iii) diastereomerer
- iv) enantiomerer

c)

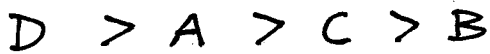


d)

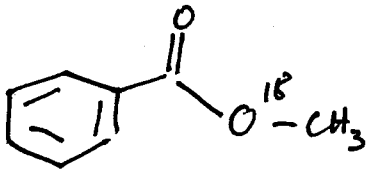
De to første stereoisomerene i c) er optisk inaktive fordi de er meso-forbindelser

Oppgave 3

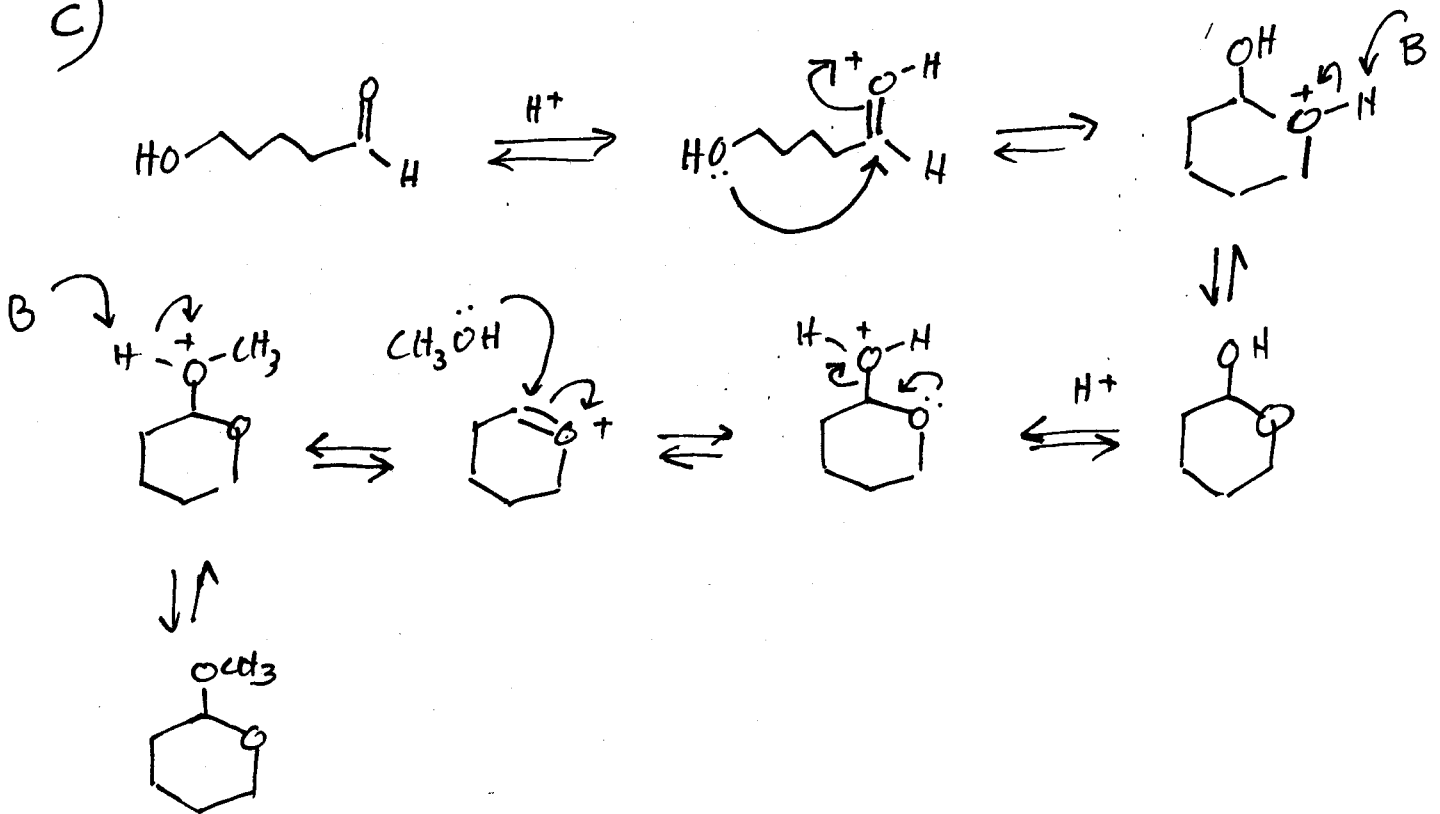
a)



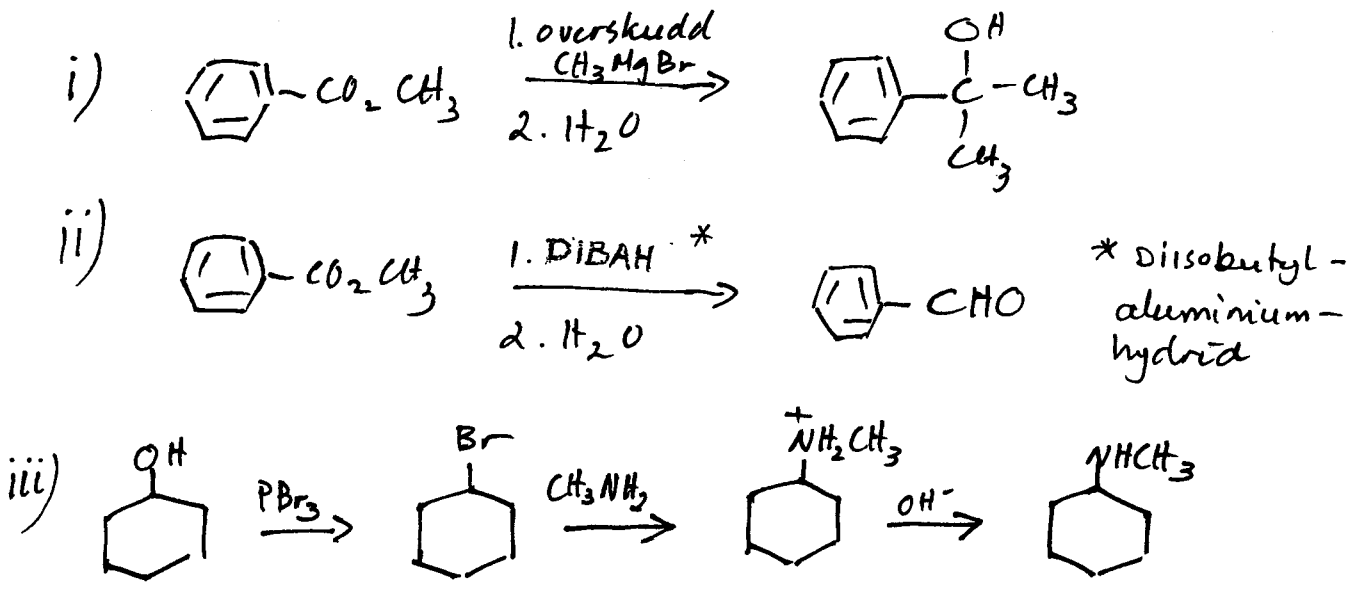
b)



c)

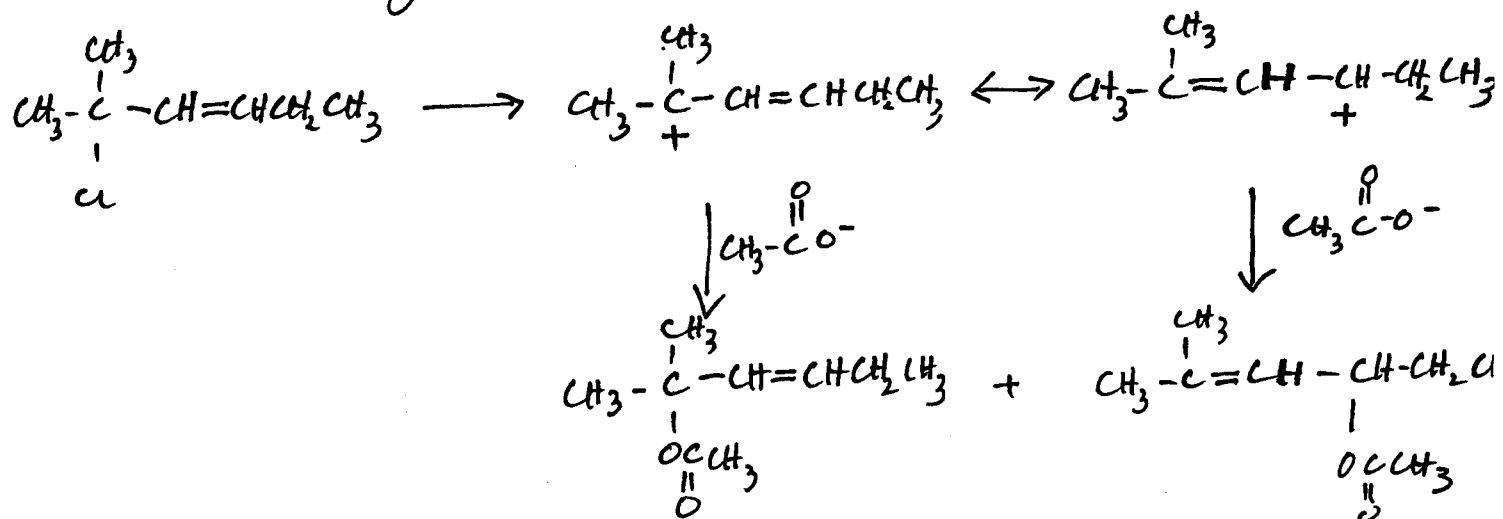


d)



Oppgave 4

a) S_N1-reaksjon



b) Metanol er en relativt dårlig nukleofil; reaksjonen vil hovedsakelig være S_N1 og det benzylike karbokationet er mest stabilt.

