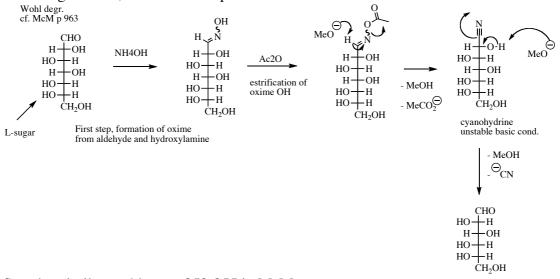
## Solution to ex. 2 and 4, problem set 4

## Exercise 2

Wohl degradation, see also McM p 963



See also similar problems p 953-955 in McM

All OH groups may be protected as esters by estrific with Ac2O and base (ex pyridine). The prot. groups may be removed by alkaline hydrol. of the esters, see McM p 956-958

## **Exercise 4**

a)

4 unsaturations al together calcd from molecular formula; 1 unsat. after  $H_2$ ; comp contains 1 ring

b) 
$$O$$
 O  $O$   $O$ 

Possible struct.:

d) 
$$H^{\oplus}$$
  $H^{\oplus}$   $H$