## Practice Exam 6ii - Answers

1. C, F, K, O, S, X, AA, CC



Empirical formula :  $C_2H_4NO$  – this cannot be the molecular formula Molecular formula:  $C_4H_8N_2O_2$  SODAR = 2

```
3.
C_{10}H_{12}O_2
Sodar = 5
C=O, C-O
Ester, or aldehyde/ketone + ether
8
4 - you know the downfield signal is due to a C=O (from IR)
yes
3
5
2:2:2:3:3
d, t
ethyl, aromatic
4
2
0
     _OEt
```