Electronegativity
F 4.0, Cl 3.0, O 3.5, S 2.5, C 2.5, H 2.5

1) a) Draw structures for 5 constitutional isomers with the molecular formula (C₄H₈) (5 pts).

b) Draw structures for 3 constitutional isomers with the molecular formula (C₉H₉NO) (3 pts).

2) Which one of the following molecules is MORE polar and clearly explain why (3 pts).

**Acetone vs DMSO**

3) Rank the stability of the labeled C-H bonds of the following compound and clearly explain why (3 pts).

4) Rank the polarity of the following molecules (6 pts)
a) F=\text{H}_2\text{C}=\text{Cl}, \text{H}_3\text{C}=	ext{Cl}, \text{H}_3\text{C}=\text{F}

b) CH₃CCl₃, CH₃CH₂Cl, CH₃CF₃