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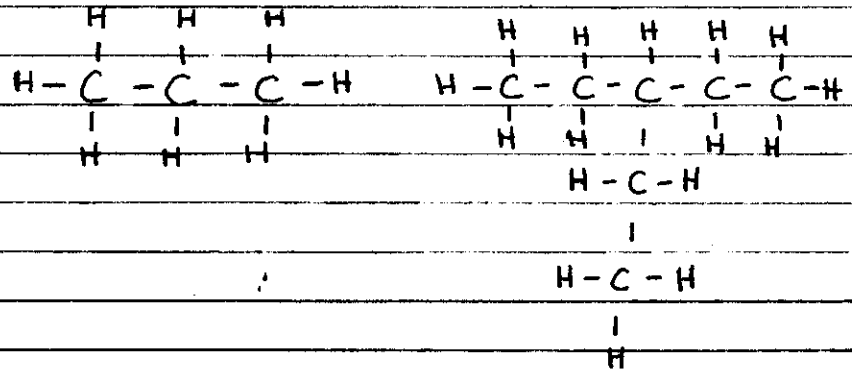
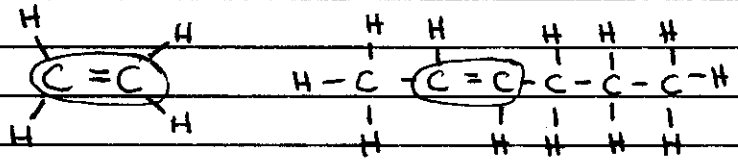
Functional Groups

- commonly occurring arrangements in organic chemistry
- based on bonding and type of atom

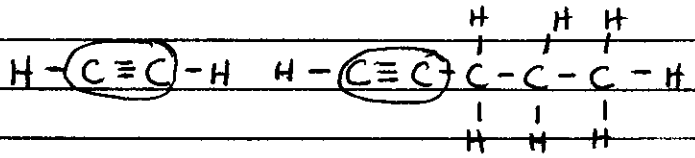
1. Alkane - single bonds only, carbon and hydrogen only



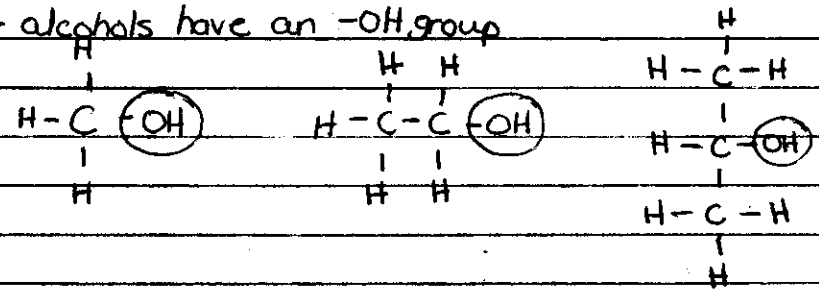
2 Alkene - carbon to carbon double bond

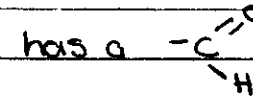


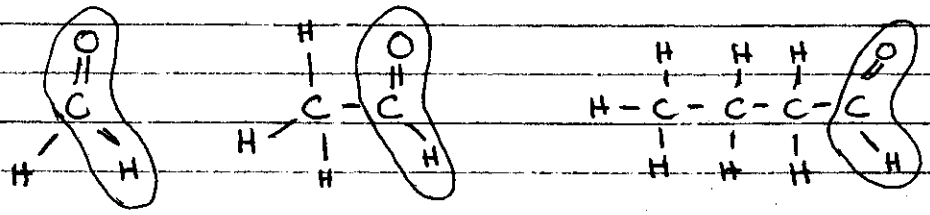
3. Alkyne - carbon to carbon triple bond



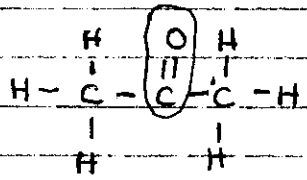
4. Alcohol - alcohols have an -OH group



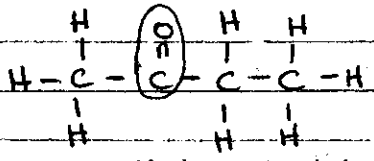
5. Aldehyde - has a  group



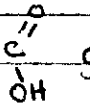
6. Ketones - contains C=O group

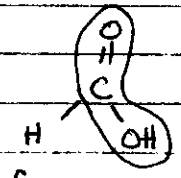


acetone

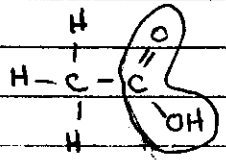


ethyl methyl ketone

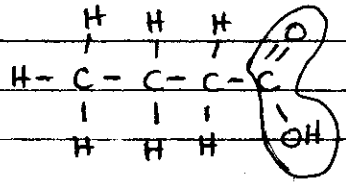
7. Carboxylic Acid - contains  group



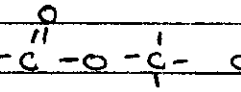
formic
(ant stings)

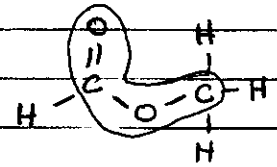


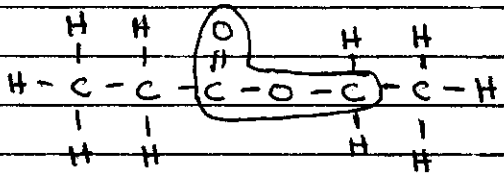
acetic acid
(vinegar)



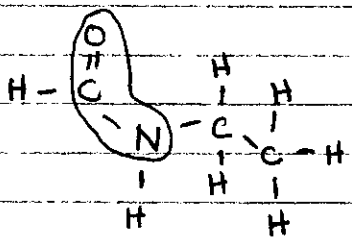
butanoic acid

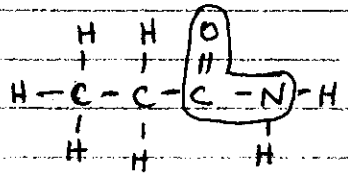
8. Esters - contains  arrangement

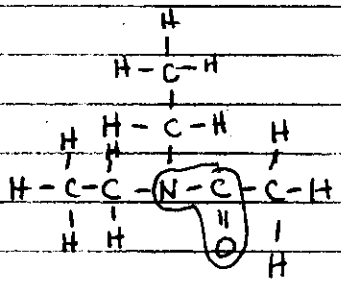




9. Amides - contains  group







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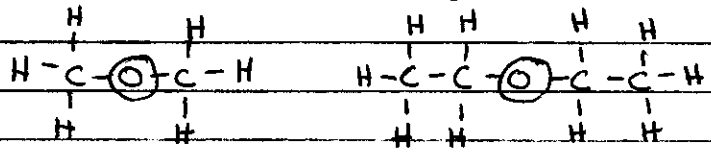
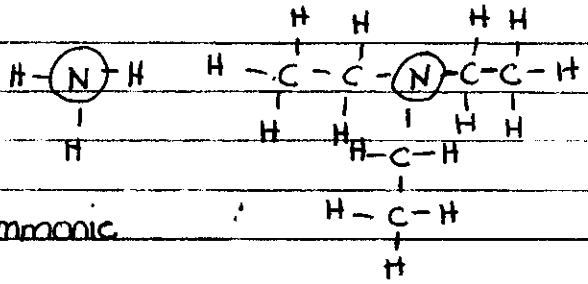
10. Ether - contains -O- group



11. Amine - contains -N-



ammonia