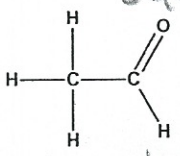
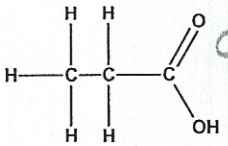
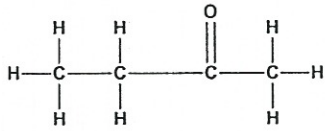
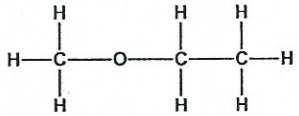
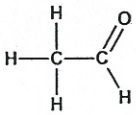
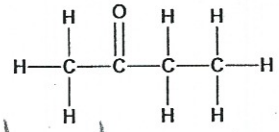
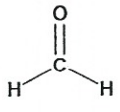
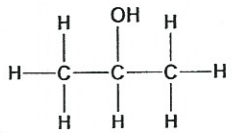
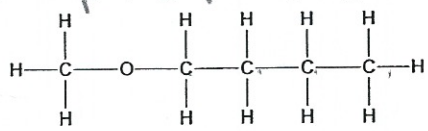
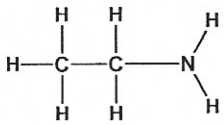
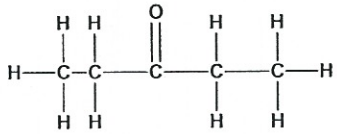
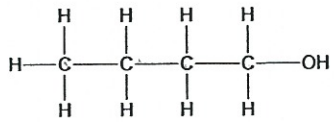
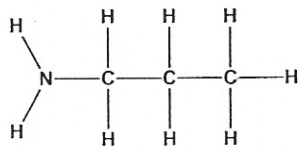
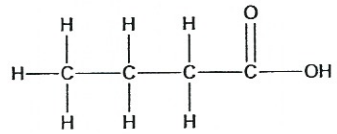
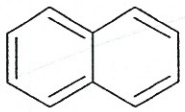
Organic Compounds and Functional groups

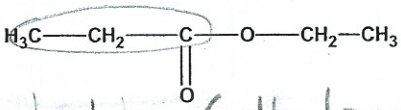
1. Name the type of organic compound each of the following would be classified as:
   a. Propanol alcohol
   b. Aminoethane amine
   c. Butanone ketone
   d. Methoxymethane ether
   e. Ethanal aldehyde
   f. 
   aldehyde
   g. 
   carboxylic acid
   h 
   ketone
   1 
   ether

2. Write the name for each of the following:

   a. 
   ethanal
   b. 
   butanone
   c. 
   methanal
   d. 
   2-propanol
   e. 
   1-methoxybutane
   f. 
   ethanamine
   g. 
   3-pentanone
   h. 
   1-butanol
   i. 
   propanamine
   j. 
   butanoic acid

3. Name the type of organic compound each of the following would be classified as:

a.  aromatic

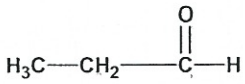
b.  ester (ethyl propanoate)

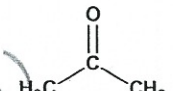
c. $H_3C-CH_2-CH_2-OH$ alcohol (1-propanol)

d. $H_3C-C\equiv C-CH_3$ alkyne

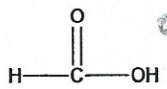
e. $C_{16}H_{34}$ alkane

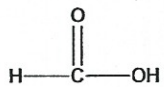
f.  (ethoxyethane) ether

g.  aldehyde (propanal)

h.  ketone (propanone)

i.  cyclic hydrocarbon (cyclopentane)

j.  carboxylic acid (methanoic acid)

k. 

l. $H_2C=CH-CH_2-CH_3$ alkene (1-butene)

4. Draw the structural formula for:

a. Methoxymethane 

b. 1-pentanol 

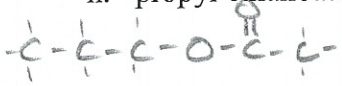
c. 1-aminobutane 

d. propanal 

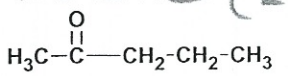
e. 2-propanol 

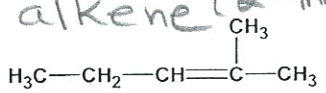
f. 2-methyl-4-octanol 

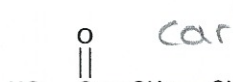
g. 2-methoxypropane 

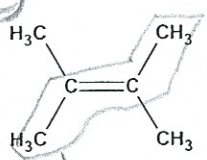
h. propyl ethanoate 

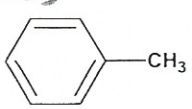
5. Name the type of organic compound each of the following would be classified as:

a.  ketone (2-pentanone)

b.  alkene (2-methyl-2-pentene)

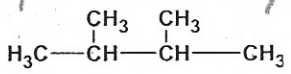
c.  carboxylic acid (propanoic acid)

k.  alkene (2,3-dimethyl-2-butene)

l.  aromatic (methyl benzene)

m.  cyclic hydrocarbon (cyclopentene)

alkane
(2,3-dimethylbutane)

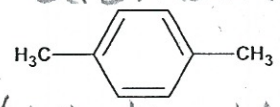
d. 

class (name)

cyclic hydrocarbon
(cyclopentane)

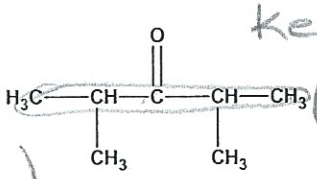
n. 

aromatic

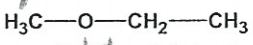
e. 

(1,4-dimethyl benzene
or p-dimethyl benzene)

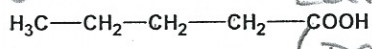
ketone

o. 
(2,4-dimethyl-3-pentanone)

ether

f. 
(methoxy ethane)

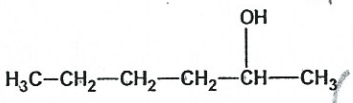
carboxylic acid

p. 
(pentanoic acid)

aldehyde

g. 
(propanal)

alcohol

q. 
(2-hexanol)

aldehyde

h. 
(pentanal)

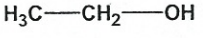
ester

r. 
(ethyl ethanoate)

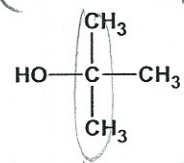
ester

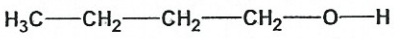
i. 
(methyl ethanoate)

alcohol

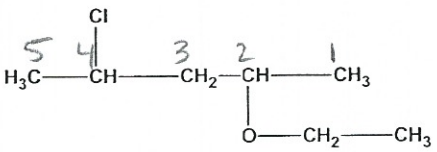
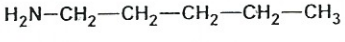
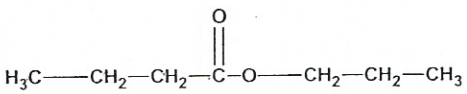
s. 
(ethanol)

alcohol

j. 
(methyl-2-propanol)

t. 
alcohol
(1-butanol)

Name or draw the following compounds:

	Chemical structure	IUPAC name
6.		Ethoxyethane
7.		2-ethoxy 4-chloro pentane
8.		1-pentanamine
9.		propyl butanoate