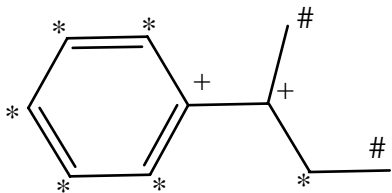


1. Identify the carbons in the following molecule as **primary**, **secondary** or **tertiary**.

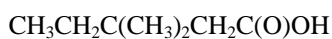
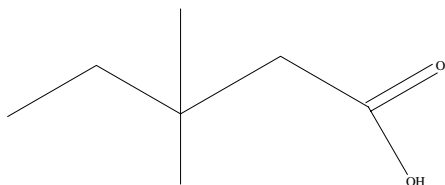


2°  
(all \*)

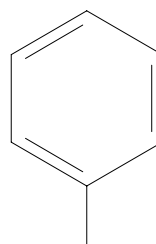
3°  
(all +)

1°  
(all #)

2. Write down condensed structures for the following molecules and name the class of compound that each one belongs to:

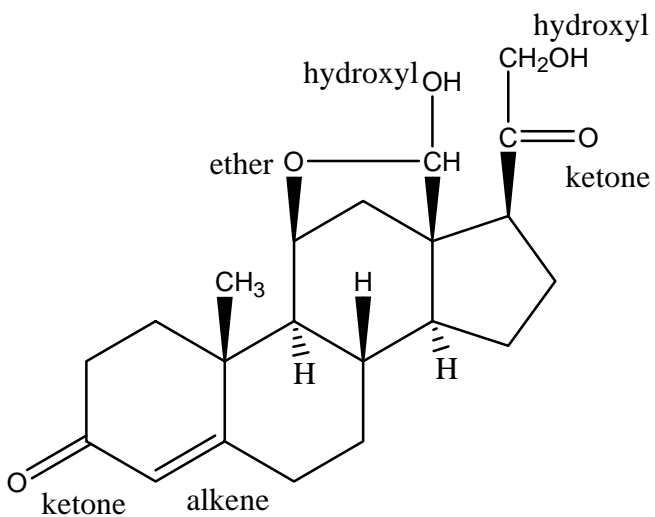


Carboxylic acid

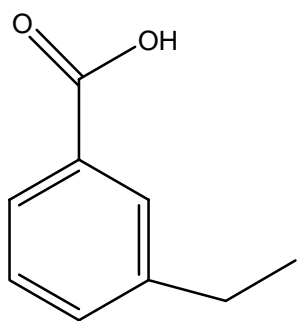


arene

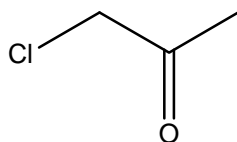
3. Identify the functional groups in the following molecule (aldosterone).



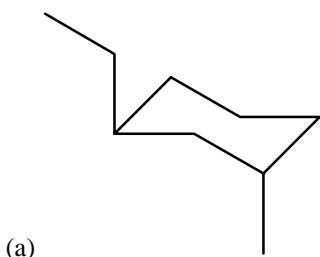
4. (a) 3-ethylbenzoic acid



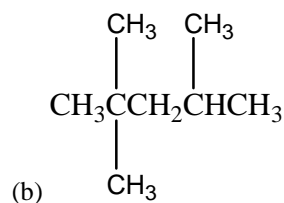
(b) 1-chloro-2-propanone



5. Name the following compounds:

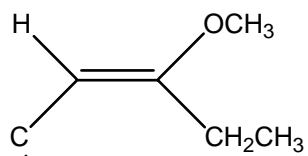


1-ethyl-3-methylcyclohexane



2,2,4-trimethylpentane

6. Assign E or Z configurations to the following substituted alkenes.



Priorities

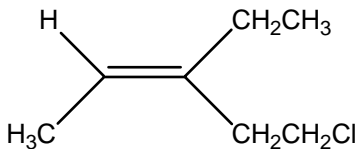
low

high

high

low

E-alkene



low

high

low

high

Z-alkene

7. Draw **hydrogen bonds** between ethanol and 2 water molecules

