

1. Ethanol and dimethyl ether have different chemical and physical properties because they have different

- A) functional groups
- B) molecular masses
- C) numbers of covalent bonds
- D) percent compositions by mass

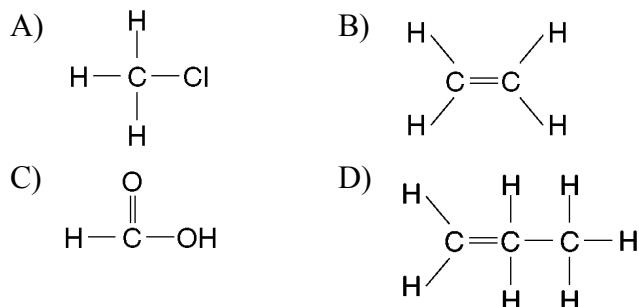
2. Given the structural formulas for two organic compounds:



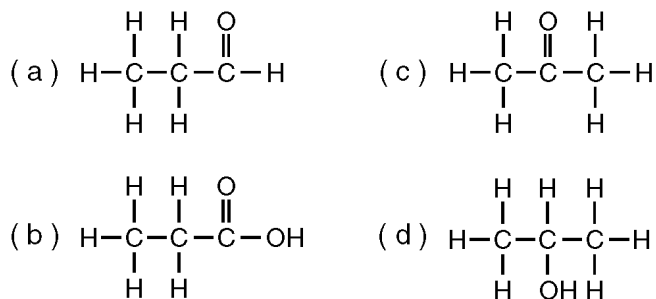
The differences in their physical and chemical properties are primarily due to their different

- A) number of carbon atoms
- B) number of hydrogen atoms
- C) molecular masses
- D) functional groups

3. Which structural formula is *incorrect*?



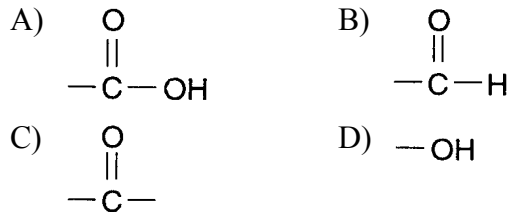
4. Given the formulas of four organic compounds:



Which pair below contains an alcohol and an acid?

- A) a and b
- B) a and c
- C) b and d
- D) c and d

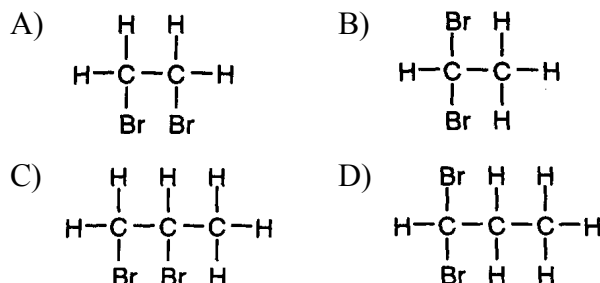
5. Which functional group, when attached to a chain of carbon atoms, will produce an organic molecule with the characteristic properties of an aldehyde?



6. Which formula represents a ketone?

- A) HCOOH
- B) HCHO
- C) CH₃COCH₃
- D) CH₃CH₂OH

7. Which structural formula represents 1,1-dibromopropane?



8. The compound CH₃COOCH₃ is classified as

- A) an acid
- B) an ester
- C) a hydrocarbon
- D) an alcohol

9. Which class of organic compounds has molecules that contain nitrogen atoms?

- A) alcohol
- B) amine
- C) ether
- D) ketone

10. What is the general formula for an ether?

