



Organic Chemistry Multiple Choice Questions

Set 4 (Chemistry Only)

You may use a periodic table to help you answer these questions.

Tick **one** box.

1. What is the general formula for the homologous series known as alkenes?
 - A. C_nH_n
 - B. C_nH_{2n}
 - C. $C_{2n}H_n$
 - D. C_nH_{2n+2}

2. What is responsible for determining the reactions of an organic compound?
 - A. its functional group
 - B. its relative molecular mass
 - C. the number of carbon atoms it contains
 - D. which fraction of crude oil it is collected from

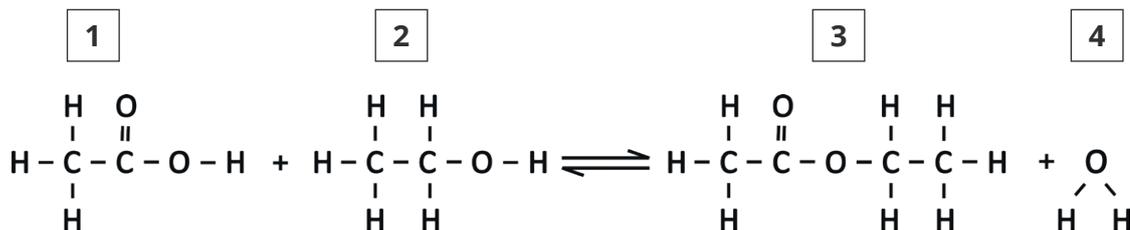
3. Which substance would **not** cause the addition of atoms across the carbon-carbon double bond when it reacts with an alkene?
 - A. hydrogen
 - B. iodine
 - C. oxygen
 - D. water

4. What is the functional group of an alcohol?
 - A. $C-C$
 - B. $C=C$
 - C. $-COOH$
 - D. $-OH$

5. Wine contains ethanol. If wine is left exposed to the air, an oxidation reaction takes place. What is the organic product of this reaction?
 - A. ethanoic acid
 - B. ethanol oxide
 - C. ethene
 - D. ethyl ethanoate

Figure 1 shows an equation for a chemical reaction.

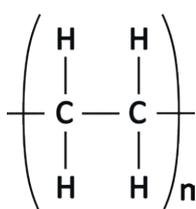
Figure 1



6. What is the name of substance **3**?
- A. ethanoic acid
- B. ethanol
- C. ethyl ethanoate
- D. poly(ethene)
7. If dissolved in water, what would you expect the pH of substance **1** in **Figure 1** to be? **(HT Only)**
- A. 1
- B. 4
- C. 7
- D. 10

8. What is the name of the monomer which produces the synthetic polymer in **Figure 2**?

Figure 2



- A. ethane
- B. ethanediol
- C. ethanedioic acid
- D. ethene
9. What is the name of the monomer which forms the natural polymer cellulose?
- A. amino acid
- B. ester
- C. glucose
- D. nucleotide
10. Which statement is true about condensation polymerisation? **(HT Only)**
- A. a small molecule is added when the monomers join
- B. a small molecule is lost when the monomers join
- C. the monomers contain the functional group C—C
- D. the repeating unit has the same atoms as the monomers