



# Organic Chemistry Multiple Choice Questions

## Set 3

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

Tick **one** box.

1. Which word most accurately describes crude oil?

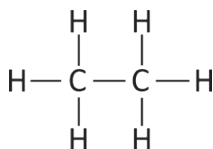
- A. compound ☐
- B. element ☐
- C. formulation ☐
- D. mixture ☐

2. Which of these formulae represents a hydrocarbon?

- A.  $C_2H_6$  ☐
- B.  $CH_3NH_2$  ☐
- C.  $C_6H_{12}O_6$  ☐
- D.  $C_2H_5OH$  ☐

3. **Figure 1** shows the displayed formula of an organic compound. What is the name of this compound?

**Figure 1**



- A. ethane ☐
- B. ethene ☐
- C. methane ☐
- D. propene ☐

4. Which of these fuels can be obtained from the fractional distillation of crude oil?

- A. diesel ☐
- B. kerosene ☐
- C. petrol ☐
- D. all of the above ☐



5. What is the trend in the flammability of hydrocarbons as the size of the hydrocarbon molecule increases?
- A. the flammability decreases ☐
  - B. the flammability increases ☐
  - C. the flammability stays the same ☐
  - D. there is no clear relationship between the flammability and the size of the molecule ☐
6. Hydrocarbons react with oxygen to produce carbon dioxide and water. What type of reaction is this?
- A. combustion ☐
  - B. displacement ☐
  - C. neutralisation ☐
  - D. thermal decomposition ☐
7. Which of the hydrocarbons below has the highest boiling point?
- A. butane ☐
  - B. ethane ☐
  - C. methane ☐
  - D. propane ☐
8. What are the products of cracking?
- A. alkanes only ☐
  - B. alkanes and alkenes ☐
  - C. alkenes only ☐
  - D. carbon and hydrogen atoms ☐
9. What is the purpose of cracking?
- A. to produce small, useful molecules ☐
  - B. to produce renewable fuels ☐
  - C. to release energy ☐
  - D. to safely dispose of crude oil ☐
10. Which is the most reactive?
- A. alkanes ☐
  - B. alkenes ☐
  - C. alkanes and alkenes are equally reactive ☐
  - D. neither alkanes nor alkenes are reactive ☐