

Test yourself

Chapter 13

1 What is the name of the following hydrocarbon?

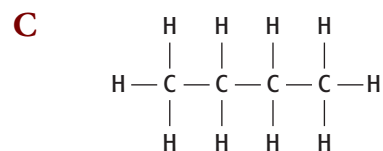


- A Heptane
- B Octane
- C Hexane
- D Decane

2 To which class of organic compounds does ethanal, CH_3CHO , belong?

- A Alcohols
- B Aldehydes
- C Esters
- D Carboxylic acids

3 Which of the following shows the displayed formula of butane?



- 4 Which one of the following is an isomer of hexane?
- A 2,3-dimethylbutane
 - B 2,3-dimethylpentane
 - C 2-methylbutane
 - D 3-methylhexane
- 5 Which one of the following species could act as a nucleophile in an organic reaction?
- A Ammonia, NH_3
 - B Bromine, Br_2
 - C Chlorine, Cl_2
 - D Hydrogen ion, H^+
- 6 When the C–Br bond in bromomethane breaks in a process known as homolytic fission, the equation is:
- $$\text{CH}_3\text{–Br} \rightarrow \text{CH}_3\cdot + \text{Br}\cdot$$
- The two species formed are called ...
- A atoms
 - B free radicals
 - C molecules
 - D ions
- 7 What is the approximate bond angle in a molecule of ethene?
- A 90°
 - B 109.5°
 - C 120°
 - D 180°

- 8 What type of organic reaction is shown in the following equation?



- A** Addition
- B** Elimination
- C** Hydrolysis
- D** Substitution
- 9 1,2-dichloroethene, $\text{C}_2\text{H}_2\text{Cl}_2$, can exhibit which form of isomerism?
- A** Structural isomerism (chain isomerism)
- B** Structural isomerism (functional group isomerism)
- C** Optical isomerism
- D** *Cis-trans* isomerism
- 10 Which of the following molecules has a chiral centre correctly labelled with an asterisk?
- A** $\text{CH}_3\text{C}^*\text{HClCH}_3$
- B** $\text{CH}_3\text{C}^*\text{HClCH}_2\text{Br}$
- C** $\text{HOCH}_2\text{C}^*\text{H}(\text{OH})\text{CH}_2\text{OH}$
- D** $\text{CH}_3\text{C}^*\text{Br}_2\text{CH}_3$