

## A Level Chemistry B (Salters)

H433/01 Fundamentals of chemistry

What's in a Medicine?

### **Question Set 5**

**Multiple Choice Questions** 

1 Which row gives correct statements for both distillation and heating under reflux?

	Distillation Heating under reflux		
A	collects volatile product	collects involatile product	
В	removes volatile product before further reaction	enables reaction to be heated for longer	
с	enables reaction to be heated for longer	avoids fires from flammable products	
D	collects involatile product	removes volatile product before further reaction	

Your answer

[1]

- 2 What is correct about a mass spectrum of a compound?
  - **A** It shows the atoms produced from the compound.
  - **B** It enables the  $M_r$  of the compound to be determined.
  - **C** It has a small M+1 peak because of some <sup>2</sup>H atoms present in the compound.
  - **D** The units of the *x*-axis are 'mass'.
  - Your answer

[1]

**3** The reaction below produces a chloroalkane.

 $R-OH + HCl \rightarrow R-Cl + H_2O$ 

Which row shows the steps to purify the liquid product in the correct order?

Α	Use a separating funnel	Distil	Dry	Remove unreacted HC <i>l</i>
в	Remove unreacted HC <i>l</i>	Use a separating funnel	Dry	Distil
С	Remove unreacted HC <i>l</i>	Use a separating funnel	Distil	Dry
D	Use a separating funnel	Remove unreacted HC <i>l</i>	Distil	Dry

Your answer

- 4 Which molecule will **not** be made when water is eliminated from CH<sub>3</sub>CH<sub>2</sub>C(CH<sub>3</sub>)(OH)CH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>?
  - **A**  $CH_3C(CH_3)=CHCH_2CH_2CH_3$
  - **B** CH<sub>3</sub>CH=C(CH<sub>3</sub>)CH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>
  - **C**  $CH_2=C(CH_2CH_3)CH_2CH_2CH_3$
  - **D**  $CH_3CH_2C(CH_3)=CHCH_2CH_3$

Your answer

- **5** What is a principle of green chemistry?
  - A Heating a reaction to speed it up
  - **B** Improving the atom economy of a process
  - C Disposing of waste efficiently
  - D Using organic solvents

Your answer

[1]

- 6 Which reaction does not occur?
  - A  $C_6H_5COOH + NaOH \rightarrow C_6H_5COONa + H_2O$
  - **B**  $C_6H_5OH$  + NaOH  $\rightarrow$   $C_6H_5ONa$  +  $H_2O$
  - **C**  $2C_6H_5COOH + CaCO_3 \rightarrow (C_6H_5COO)_2Ca + CO_2 + H_2O$
  - **D**  $2C_6H_5OH + Na_2CO_3 \rightarrow 2C_6H_5ONa + CO_2 + H_2O$

Your answer

# [1]

#### **Total Marks for Question Set 5: 6**



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