Test yourself

Chapter 16

1 Which one of the following alcohols is a secondary alcohol?

A 2-methylbutan-1-ol

B Ethanol

C Hexan-3-ol

D 2-methylpropan-2-ol

2 Complete combustion of an alcohol produces which of the following products?

I carbon dioxide

II carbon monoxide

III hydrogen

IV water

A **I** only

B **I** and **II**

C **I** and **IV**

D **II** and **IV**

3 Hydrogen chloride can react with ethanol to produce 1-chloroethane. What do we call the mechanism of this reaction?

A Nucleophilic addition

B Free-radical substitution

C Electrophilic addition

D Nucleophilic substitution

4 Which one of the following could be used to prepare 1-iodoethane from ethanol?

A CH_3I

B ICl

C PI_3

D I_2

5 Name the products formed when sodium metal reacts with ethanol.

A Sodium ethoxide and hydrogen

B Sodium oxide and ethene

C Sodium hydroxide and ethene

D Sodium methoxide and water

6 Name the ester formed when methanol reacts with butanoic acid in the presence a few drops of concentrated sulfuric acid.

A Butyl methanoate

B Methyl butanoate

C 2-methylpropyl butanoate

D 2-methylpropyl methanoate

7 When propan-1-ol vapour undergoes a reaction on heated porous pot it produces propene gas. What do we call this type of reaction?

A Addition

B Combustion

C Dehydration

D Substitution

8 Butan-2-ol is heated under reflux for 15 minutes with excess acidified potassium dichromate(VI) solution. What is the organic product formed?

A Butan-1-ol

B But-1-ene

C Butanoic acid

D Butanone

9 Butan-1-ol is heated under reflux for 15 minutes with excess acidified potassium dichromate(VI) solution. What is the organic product formed?

A Butan-1-ol

B But-2-ene

C Butanoic acid

D Butanone

10 With which one of the following alcohols will the colour of acidified potassium dichromate(VI) remain orange when heated?

A 2-methylpropan-2-ol

B Propan-2-ol

C Propan-1-ol

D 2-methylpentan-3-ol