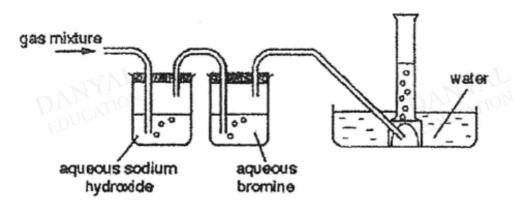
# <u>O Level Combined Chemistry MCQs</u> <u>Organic Chemistry – Combined Test 1.0</u>

## Q1

A gaseous mixture of ethene, oxygen and sulfur dioxide is passed through the apparatus shown. Only one of the gases is collected.



What is a property of the gas collected?

- A Gas burns with a yellow flame.
- B Gas forms a white precipitate with limewater.
- C Gas reacts with propane to produce carbon dioxide.
- D Gas turns acidified potassium manganate (VII) solution colourless.

## Q2

Which of the following must be the same for compounds in the same homologous series?

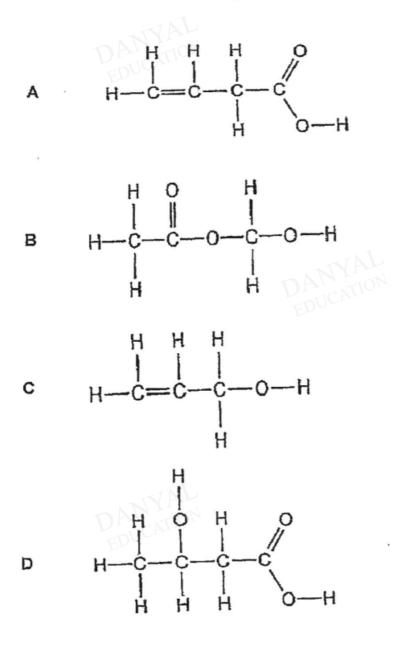
- A empirical formula
- B functional group
- C physical properties
- D structural formula

## Q3

The table below shows the results of tests carried out on compound X.

test	result	
bromine water is added	bromine water is decolourised	
sodium carbonate is added	colourless acidic gas evolved	

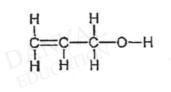
Which formula represents compound X?

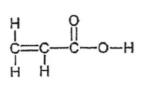


An organic compound X has the following reactions:

- neutralises sodium hydroxide
- · decolourises aqueous bromine

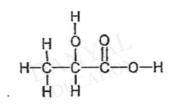
Which of the following structures best represents X?

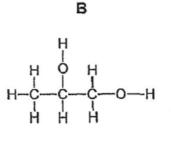




С

Α

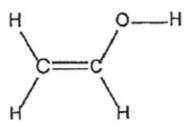




D

## Q5

An organic compound is shown below.



What functional groups are present in this compound?

- A alkane and carboxyl groups
- B alkane and hydroxyl groups
- C alkene and carboxyl groups
- D alkene and hydroxyl groups

#### Q6

Which statement about a homologous series is not correct?

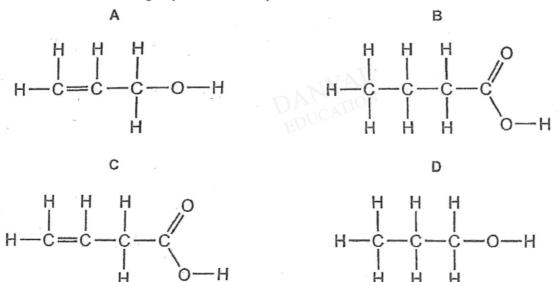
- A The members have similar chemical properties.
- B The members have the same functional group.
- C The flammability increases with increasing relative molecular mass.
- D The boiling point increases with increasing relative molecular mass.

## Q7

The results of two tests on compound Z are shown.

EDUctest	result	E
add bromine water	turns colourless	
add aqueous sodium carbonate	carbon dioxide formed	

Which of the following represents compound Z?



#### Q8

A hydrocarbon P is cracked to be Q and hydrogen. Compound R is formed by the addition polymerisation of Q.

To which homologous series do P, Q and R belong?

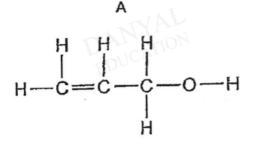
	Р	Q	R
A	alkene	alkane	alkane
в	alkane	alkene	alkane
С	alkane	alkane	alkene
D	alkane	alkene	alkene

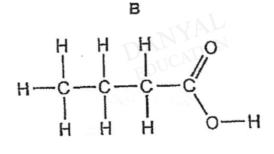
Q9

The results of two tests on compound Z are shown.

test	result	
add bromine water	turns colourless	
add aqueous sodium carbonate	carbon dioxide formed	

Which of the following represents compound Z?





D





#### Q10

Which of the following statements correctly describes the homologous series of alkanes, alkenes, alcohols and carboxylic acids?

- A They are all hydrocarbons.
- B They are all soluble in water.
- C They are able to undergo addition polymerization.
- D They burn in excess oxygen to form carbon dioxide and water.

#### **Answers**

**Organic Chemistry Test 1.0** 

Q1 C

- Q2 B
- Q3 A
- Q4 C
- Q5 D
- Q6 C
- Q7 C
- Q8 B
- Q9 C
- Q10 D