FOUNDATION

2.8 Organic Chemistry: 10-minute Pack

AQA 8462 · Calculator allowed · about 10 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 Name the following organic molecules represented by their condensed formulas.

(a) Name: $CH_3CH_2CH_2CH_3$ **(1)**

(b) Name: CH_3CHO **(1)**

(Total for Question 1 is 2 marks)

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2 A student burns methane in a laboratory Bunsen burner with a good supply of oxygen.

(a) Write the word equation for the complete combustion of methane. **(2)**

(Total for Question 2 is 2 marks)

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3 Alkenes are hydrocarbons that contain a carbon-carbon double bond and can undergo addition reactions.

(a) Give the functional group that identifies an alkene. **(1)**

(b) Name the alkene with two carbon atoms. **(1)**

(Total for Question 3 is 2 marks)

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4 A petrol fraction contains hydrocarbons of about 7 to 10 carbon atoms. Larger hydrocarbons are found in diesel and heavy fuel fractions.

(a) State whether hydrocarbons with 8 carbon atoms have higher or lower boiling points than hydrocarbons with 16 carbon atoms, and give a simple reason. **(2)**

(b) Give one common use of the petrol fraction. **(1)**

(Total for Question 4 is 3 marks)

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Mark scheme · 2.8 Organic Chemistry: 10-minute Pack

Question 1

(a) butane cao **B1**

(a) Answer: Butane

(b) ethanal (accept acetaldehyde) cao **B1**

(b) Answer: Ethanal

Question 2

(a) correct reactants and products named: methane + oxygen -> carbon dioxide + water **M1**

(a) word equation presented correctly with reactants and products in the correct order using -> or gives, cao **A1**

(a) Answer: Methane + oxygen -> carbon dioxide + water

Question 3

(a) carbon-carbon double bond (C=C) cao **B1**

(a) Answer: Carbon-carbon double bond (C=C).

(b) ethene cao **B1**

(b) Answer: Ethene

Question 4

(a) states lower boiling point for C8 than for C16 **M1**

(a) reason: smaller molecules have weaker van der Waals forces due to less surface area/fewer electrons, oe **A1**

(a) Answer: Lower boiling point, because smaller molecules have weaker van der Waals forces due to less surface area and fewer electrons.

(b) use as fuel for petrol engines/cars cao **B1**

(b) Answer: Fuel for car engines (petrol).

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