

Please write clearly in block capitals.

Centre number

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Candidate number

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Surname

Forename(s)

Candidate signature

I declare this is my own work.

GCSE GEOGRAPHY

Paper 2 Challenges in the Human Environment

Time allowed: 1 hour 30 minutes

Materials

For this paper you must have:

- the insert (enclosed)
- a pencil
- a rubber
- a ruler.

You may use a calculator.

Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.

Answer all questions in Section A and Section B.
Answer Question 3 and one other question in Section C.

- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- If you need additional extra space for your answer(s), use the lined pages at the end of this book.
Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The total number of marks available for this paper is 88.
- Spelling, punctuation, grammar and specialist terminology will be assessed in Question **01.11**.
- HIC is a higher income country.
- LIC is a lower income country.
- NEE is a newly emerging economy.

For Examiner's Use	
Question	Mark
1	
2	
3	
4	
5	
6	
TOTAL	



J U N 2 1 8 0 3 5 2 0 1

For the multiple-choice questions, shade the circle next to the correct answer.

CORRECT METHOD 

WRONG METHODS    

If you want to change your answer you must cross out your original answer as shown.



If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown.



Section A Urban issues and challenges

Answer **all** questions in this section.

Question 1 Urban issues and challenges

0 1 . 1 What is meant by rural-urban migration?

[1 mark]



Study **Figure 1**, a map showing cities that are expected to become megacities by 2035.

Figure 1



0 1 . 2 Describe the distribution of the cities shown in **Figure 1**.

[2 marks]

0 1 . 3 Outline **one** reason why managing transport is important for urban sustainability.

[2 marks]

Question 1 continues on the next page

Turn over ►



Study **Figure 2**, photographs of the Vertical Forest development in Milan, a city in Italy.

Figure 2



0 1 . 4 Explain why creating green space is important for sustainable urban living.

Use **Figure 2** and your own understanding.

[4 marks]



Extra space

Question 1 continues on the next page

Turn over ►



Study **Figure 3**, in the insert, a 1:50 000 Ordnance Survey map showing part of Aberdeen, a city in the UK.

0 1 . 5 Using **Figure 3**, give the four-figure grid reference for the park and ride.

Shade **one** circle only.

[1 mark]

A 0686

☐

B 0687

☐

C 8606

☐

D 8706

☐

0 1 . 6 Using **Figure 3**, what is the distance along the A944 from the junction at 854063 to the edge of the built up area at 890066?

Shade **one** circle only.

[1 mark]

A 2.8 km

☐

B 3.3 km

☐

C 3.8 km

☐

D 4.3 km

☐

0	1	.	7
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Use **Figure 3** and **Figure 4** and your own understanding.

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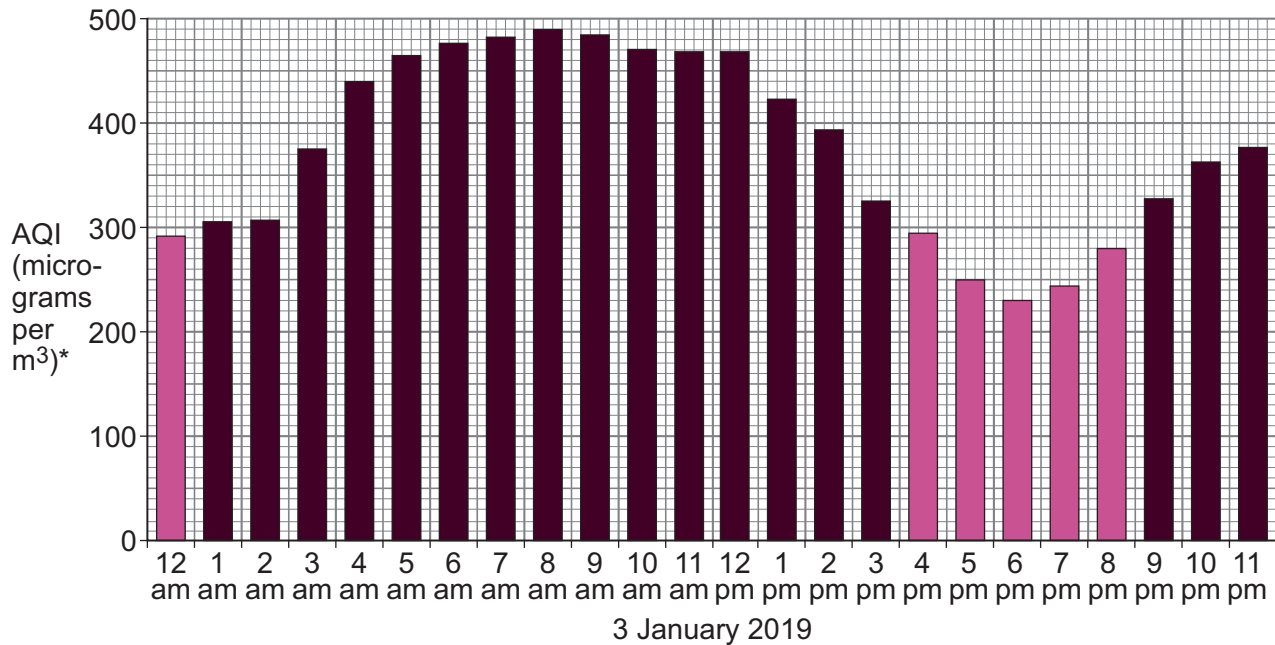
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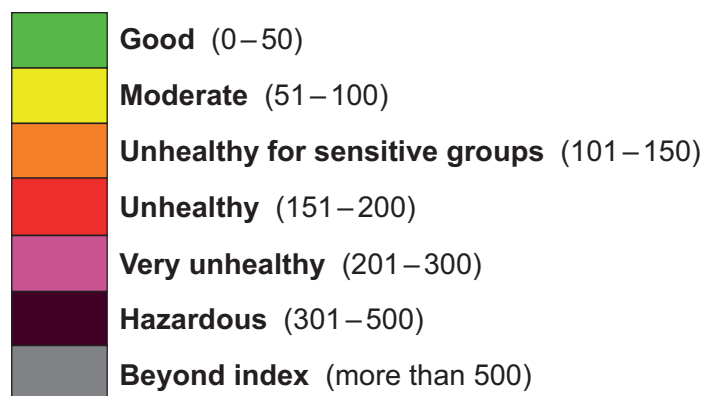
Study **Figure 5**, a graph showing air pollution for 24 hours on 3 January 2019 in New Delhi, a city in India.

Figure 5



*Air Quality Index (micrograms per cubic metre)

Air Quality Index



0 1 . 8 At what time of day is air pollution the highest?

[1 mark]

0 1 . 9 Calculate the range in air pollution levels shown in **Figure 5**.

[1 mark]

_____ micrograms per cubic metre



0	1	.	1	0
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Outline **one** reason why levels of air pollution are so high in many LIC/NEE cities.
[2 marks]

Question 1 continues on the next page

Turn over ►



[9 marks]
[+ 3 SPaG marks]

Name of LIC/NEE city _____

Extra space _____



33

End of Section A
Turn over for Section B

Turn over ►

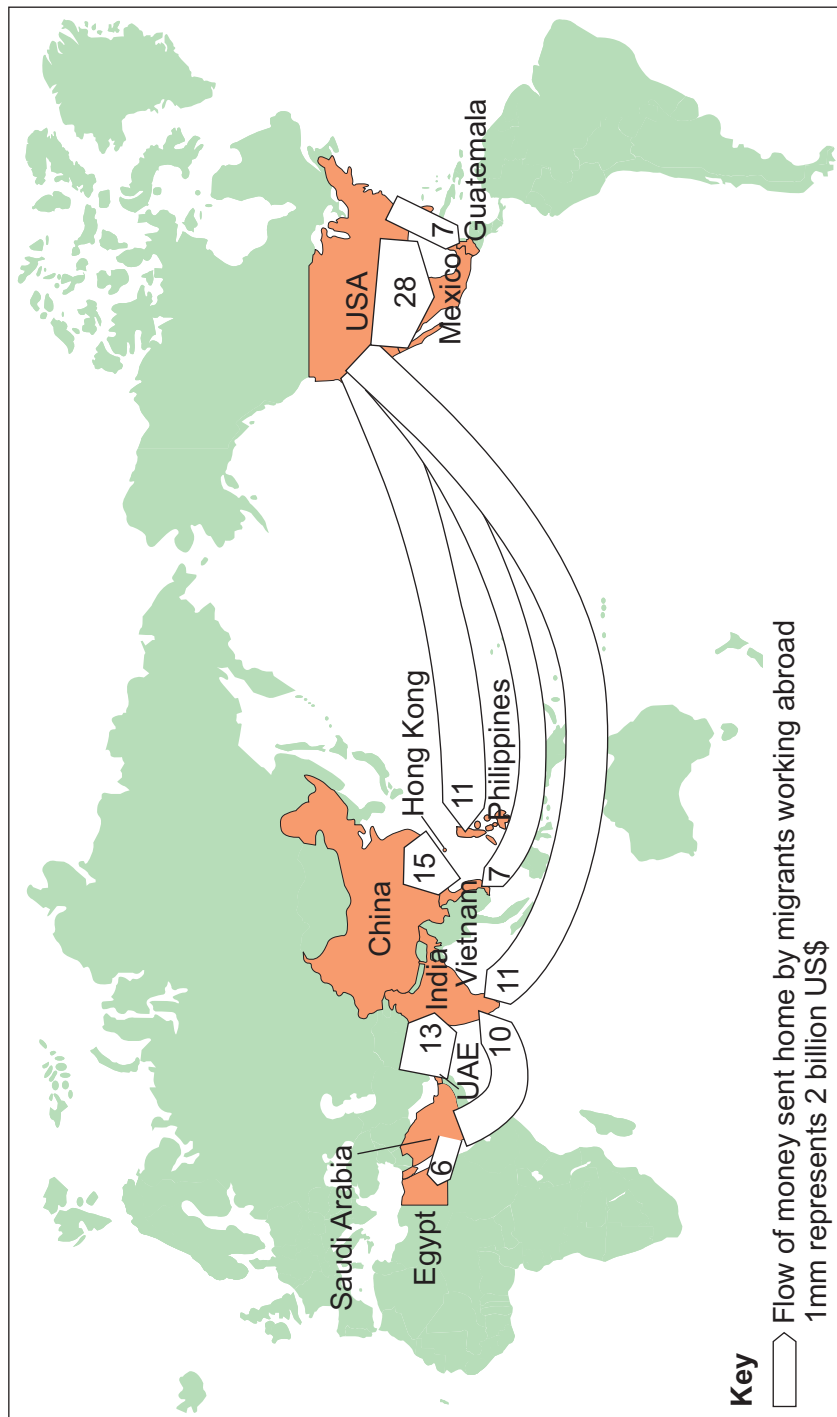
Section B The changing economic world

Answer **all** questions in this section.

Question 2 The changing economic world

Study **Figure 6**, a world map showing the 10 largest global flows of money sent home by migrants working abroad in 2016.

Figure 6



0 2 . 1 Use the following data to complete **Figure 6**.

[2 marks]

From	To	Amount US\$ billion
USA	China	14

0 2 . 2 Guatemala's gross national income (GNI) in 2016 was US\$135 billion. The amount Guatemala receives from migrants in the USA is US\$7 billion.

Calculate the percentage of Guatemala's GNI that comes from payments sent home by people who have migrated to the USA.

Answer to the nearest whole %.

[1 mark]

0 2 . 3 Outline how uneven development can cause international migration.

[3 marks]

0 2 . 4 Describe the social **or** cultural background of a named LIC/NEE country.

[2 marks]

Name of country _____

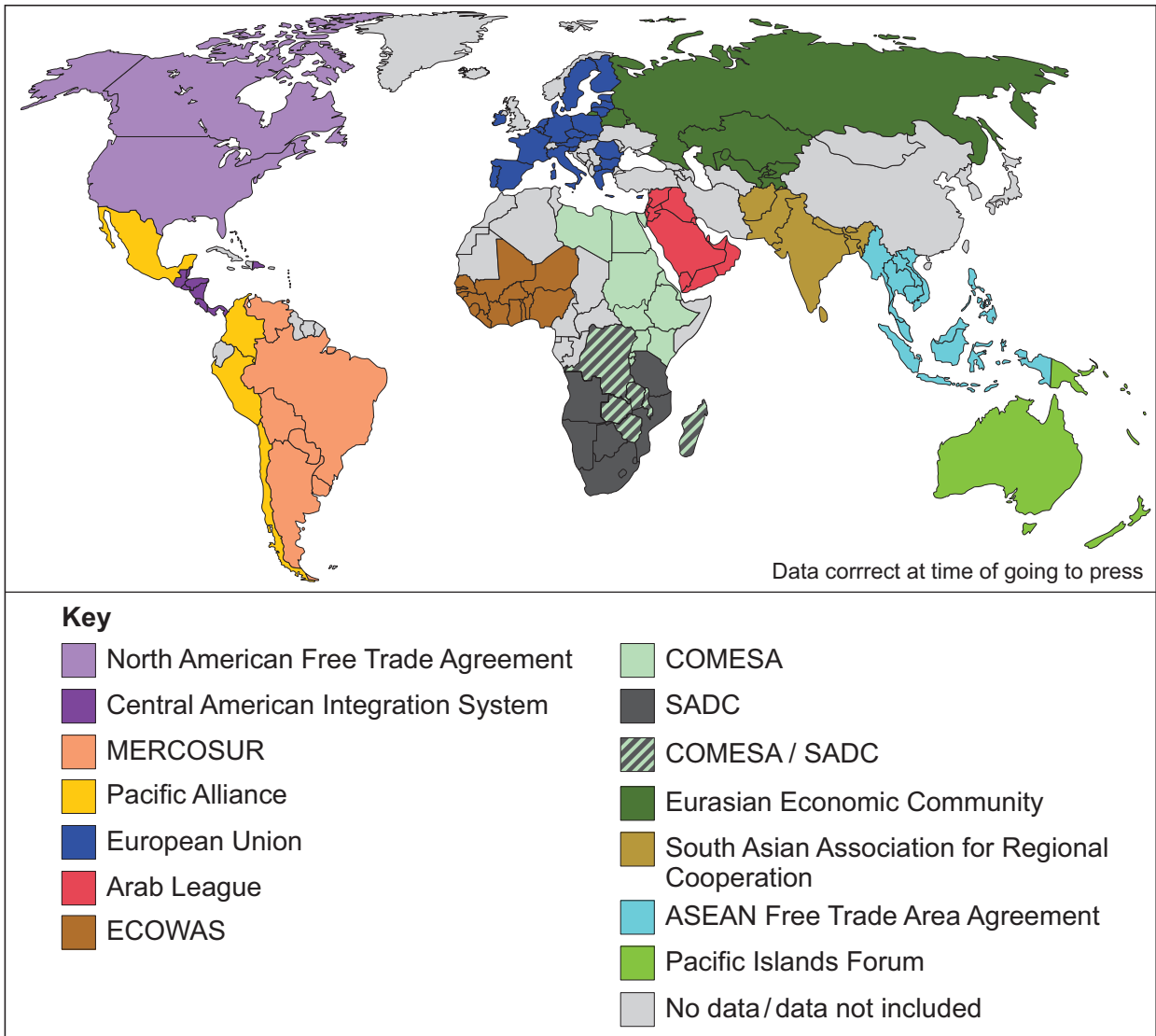
Question 2 continues on the next page

Turn over ►



Study **Figure 7**, a map showing some of the main regional trade groupings in the world.

Figure 7



0 2 . 5 Using **Figure 7**, which trading group in South America has the most member countries?

[1 mark]



0 2 . 6 Explain how **one** country's trading relationships with the wider world have changed.

Use **Figure 7** and an LIC/NEE you have studied.

[4 marks]

Name of country _____

Extra space _____

Question 2 continues on the next page

Turn over ►



Study **Figure 8**, some information about Asha. Asha is an aid project in Delhi, a city in India.

Figure 8

Asha is a charity which aims to work with the urban poor to bring long-term and sustainable improvement to their quality of life, regardless of their background or religion.

Around 700 000 people in 91 slums have benefited from Asha's work.

The charity receives money from a number of sources, including Indian, British and Australian governments, some UK schools, international banks, and other charities.

Asha allows slum residents access to banks. They can open accounts with no money and can benefit from loans at extremely good rates. Some people have tripled their incomes and 99% make loan repayments on time.

Asha provides resource centres, all of which have computers and broadband internet, and children are encouraged to take a basic computer course. English classes help children grow in confidence and develop skills that narrow the gap between them and better-off youngsters.

0 2 . 7 Use **Figure 8** to state **one** source of Asha's funding.

[1 mark]

0 2 . 8 Use **Figure 8** to state **one** way that Asha helps slum dwellers financially.

[1 mark]



1 7

Social and economic changes in the UK rural landscape are:

- Do you agree?

Justify your answer, using **one or more** examples.

[9 marks]

[illegible]

Extra space _____



30

End of Section B
Turn over for Section C

Turn over ►

Section C The challenge of resource management

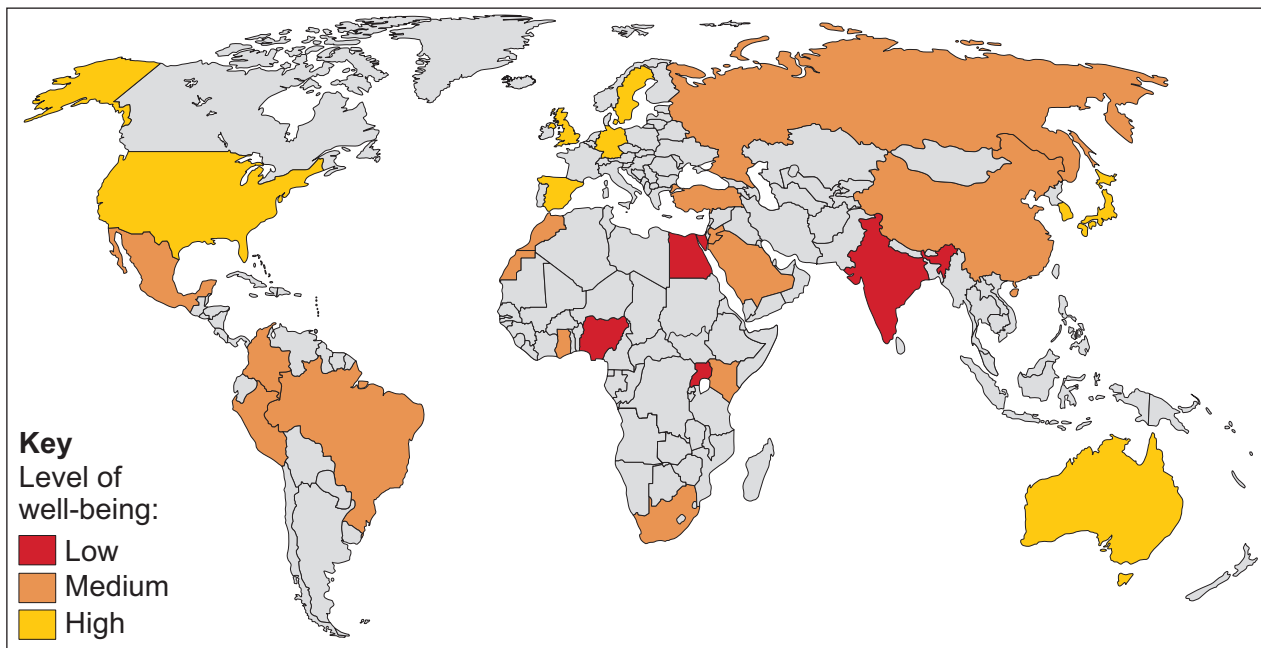
Answer **Question 3** and

either Question 4 (Food) **or** Question 5 (Water) **or** Question 6 (Energy).

Question 3 The challenge of resource management

Study **Figure 9**, a map showing the levels of well-being for young people in selected countries.

Figure 9



0 3 . 1 Suggest how access to clean water may influence the differences in levels of well-being shown in **Figure 9**.

[2 marks]



0 3 . 2 Name **one** area in the UK that experiences water deficit.

[1 mark]

0 3 . 3 There is a need to transfer water in the UK to maintain supplies.

Explain how changing demand for water increases this need.

[3 marks]

Question 3 continues on the next page

Turn over ►



Study **Figure 10a** and **Figure 10b**.

Figure 10a shows the amount of carbon dioxide (CO₂) emitted to produce 1 kg of food.

Figure 10b is a screenshot of a local food organisation's website.

Figure 10a

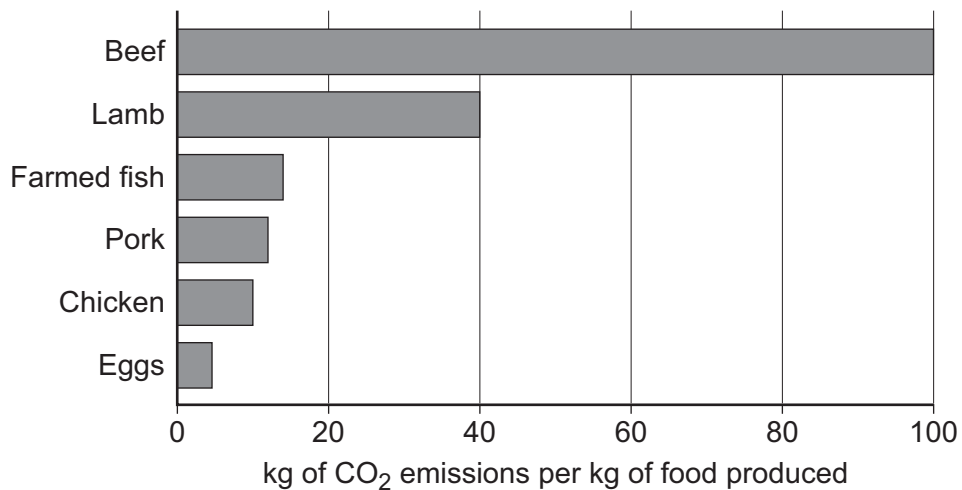


Figure 10b

The screenshot shows the homepage of the edible16.org.uk website. The header includes the logo 'edible16.org.uk' and social media links for Facebook, Twitter, and Instagram. The navigation menu has links for Home, Shop, Producers, Recipes, Blog & Offers, and Contact Us. The main banner features a collage of food images with the text 'Real Local Food. Delivered to your Door.' and a 'Go Shopping' button. Below the banner, a text block states: 'edible16 is a not-for-profit online shopping service bringing the very best of locally produced food and drink to the people in and around Market Harborough.' The 'How it works' section is illustrated with three steps: 1. Place your order on www.edible16.org.uk (with a computer icon), 2. We source and pack your order (with a box icon), and 3. We deliver everything to you in one go (with a truck icon).



0	3	.	4
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‘Growing concern in the UK about the carbon footprint of food creates both opportunities and challenges.’

Use evidence from **Figure 10a** and **Figure 10b** to explain this statement.

[6 marks]

Extra space _____

12

End of Question 3

Turn over for the next question

Turn over ►

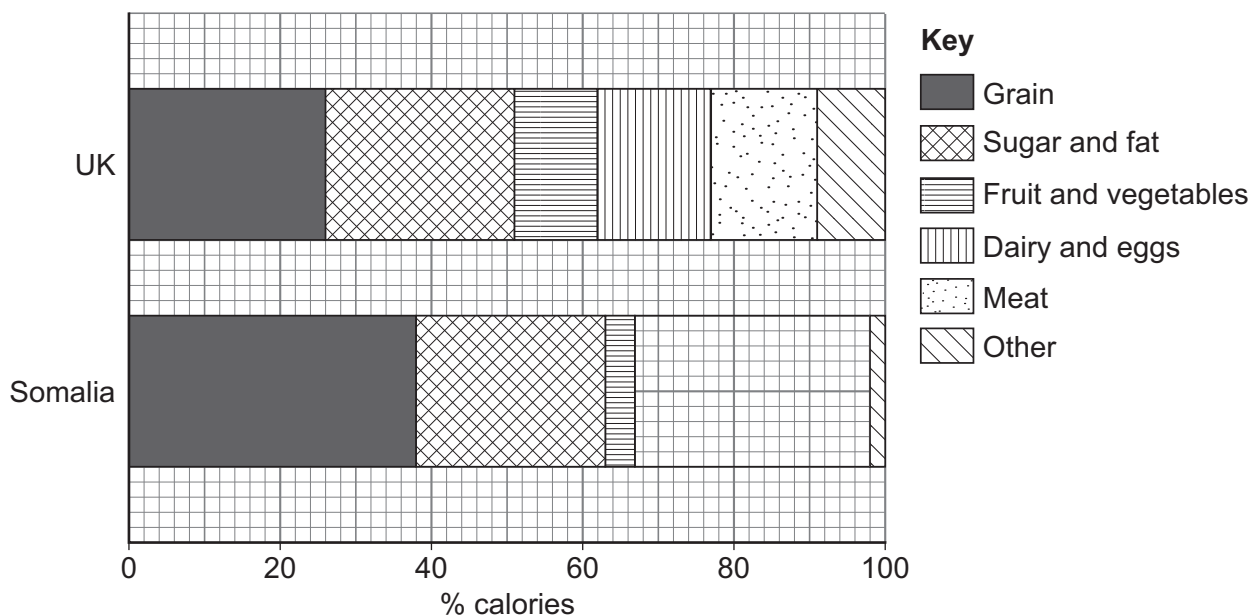


Answer **either** Question 4 (Food) **or** Question 5 (Water) **or** Question 6 (Energy).

Question 4 Food

Study **Figure 11**, a divided bar chart showing the typical daily diet in the UK and Somalia.

Figure 11



0 4 . 1 Complete **Figure 11** using the following data for Somalia.

Food	% calories
Dairy and eggs	24
Meat	7

[2 marks]

0 4 . 2 State **two** differences between the typical daily diet in the UK and Somalia shown in **Figure 11**.

[2 marks]

1 _____

2 _____



0 4 . 3 Outline **one** reason for differences in food supply between countries.

[2 marks]

0 4 . 4 What is meant by food insecurity?

[1 mark]

Question 4 continues on the next page

Turn over ►



Study **Figure 12a** and **Figure 12b**.

Figure 12a – Newspaper article

EGYPT HIT HARD BY PRICE RISES

Shoppers in Egypt are struggling to afford basic foods after huge price increases.

During February 2017 the price of rice increased by 72%, sugar by 70% and milk by 42%.

Figure 12b – Protests about rising bread prices in Tunisia



0 4 . 5

Suggest how food insecurity can have both economic and social impacts.

Use **Figure 12a** and **Figure 12b** and your own understanding.

[6 marks]



Extra space

13

End of Question 4

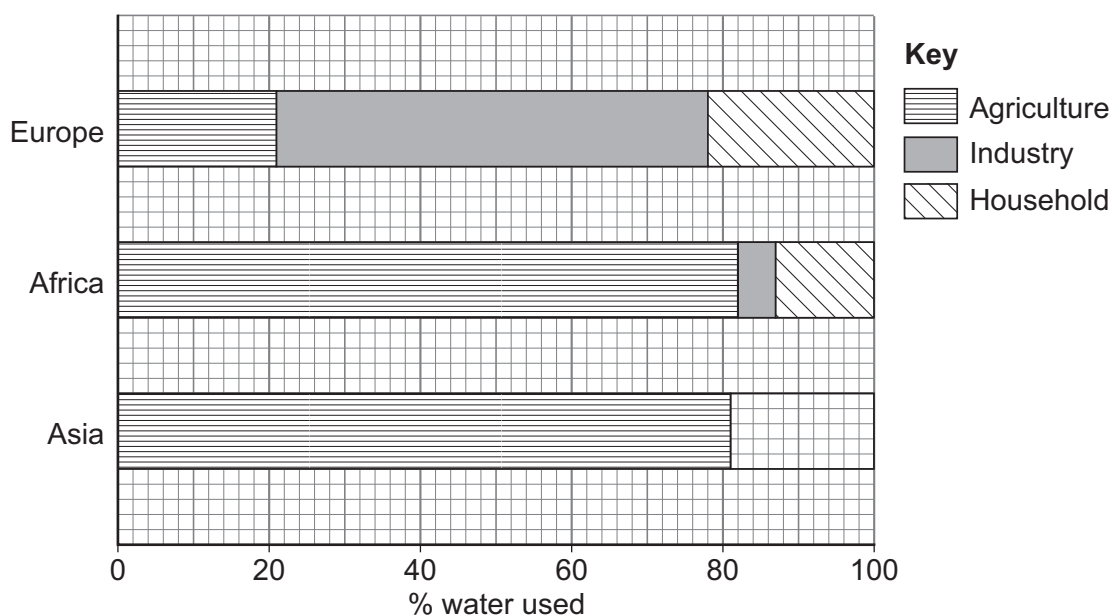
If you have answered Question 4, do not answer Question 5 or 6

Turn over ►



Question 5 Water

Study **Figure 13**, a divided bar chart showing water use by different sectors of the economy in Europe, Africa and Asia.

Figure 13

0 5 . 1 Complete **Figure 13** using the following data for Asia.

Sector	% water used
Industry	10
Household	9

[2 marks]

0 5 . 2 State **two** differences between the water use in Europe and Africa shown in **Figure 13**.

[2 marks]

- 1 _____
- _____
- 2 _____
- _____



0 5 . 3 Outline **one** reason for differences in water use between countries.

[2 marks]

0 5 . 4 What is meant by water insecurity?

[1 mark]

Question 5 continues on the next page

Turn over ►



Study **Figure 14a** and **Figure 14b**.

Figure 14a – Queues for water in South Africa



Figure 14b – Protest sign in the USA



0 5 . 5 Suggest how water insecurity can have both economic and social impacts.

Use **Figure 14a** and **Figure 14b** and your own understanding.

[6 marks]



Extra space

13

End of Question 5

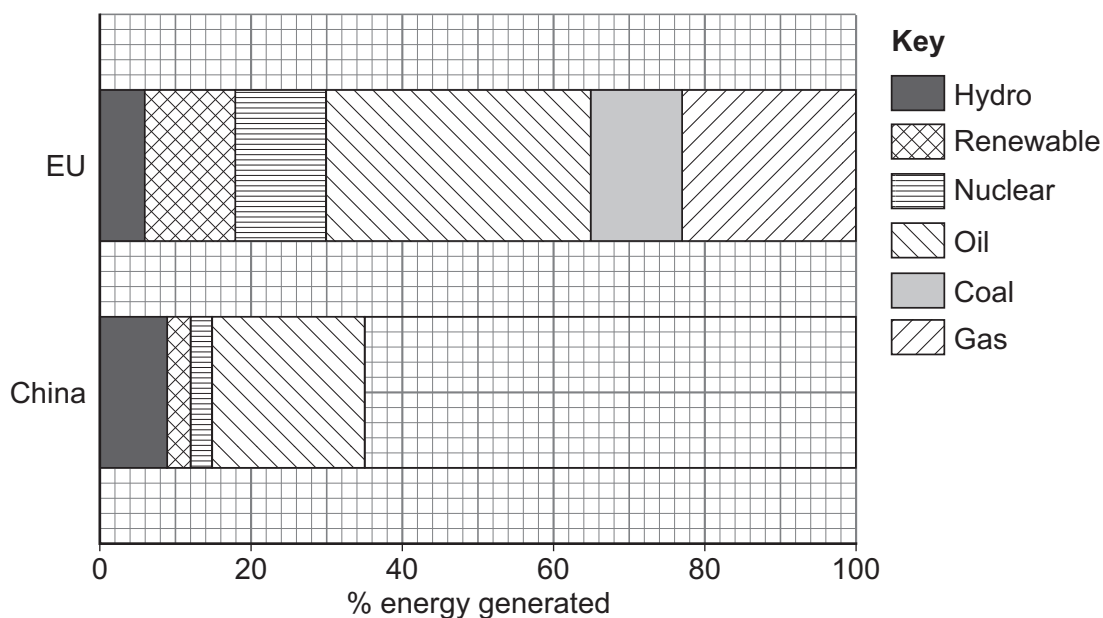
If you have answered Question 5, do not answer Question 4 or 6

Turn over ►



Question 6 Energy

Study **Figure 15**, a divided bar chart showing the energy mix in the European Union (EU) and China.

Figure 15

0 6 . 1 Complete **Figure 15** using the following data for China.

Energy source	% energy generated
Coal	59
Gas	6

[2 marks]

0 6 . 2 State **two** differences between the energy mix in the EU and China shown in **Figure 15**.

[2 marks]

- 1 _____
- _____
- 2 _____
- _____



0 6 . 3 Outline **one** reason for differences in energy use between countries.

[2 marks]

0 6 . 4 What is meant by energy insecurity?

[1 mark]

Question 6 continues on the next page

Turn over ►



Study **Figure 16a** and **Figure 16b**.

Figure 16a – Drilling for oil in the Amazon Rainforest



Figure 16b – Cleaning up after an oil spill



0 6 . 5 Suggest how energy insecurity can have both economic and environmental impacts.

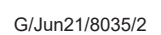
Use **Figure 16a** and **Figure 16b** and your own understanding.

[6 marks]



13

END OF QUESTIONS



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