AQA

Please write clearly in block capitals.

Centre number | | | | | |  Candidate number | | | | |

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** | |

Do not write outside the box

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]**

_____

_____

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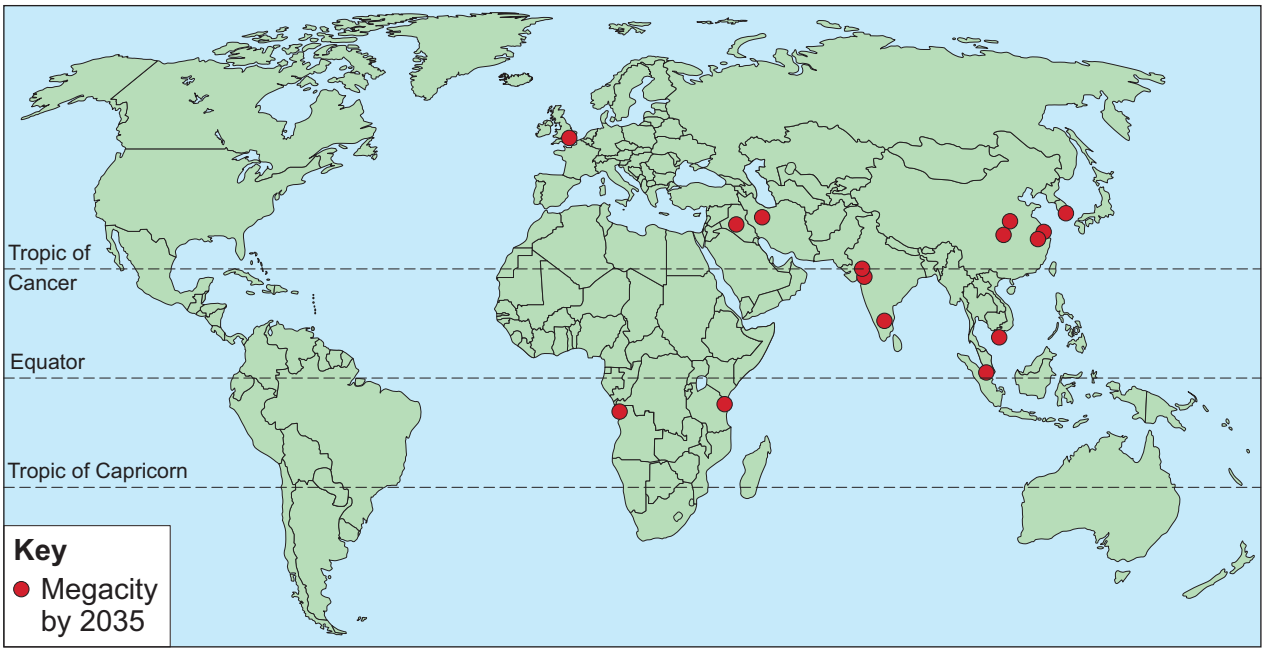
Study **Figure 1**, a map showing cities that are expected to become megacities by 2035.

**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]**

_____

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_____

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**Question 1 continues on the next page**

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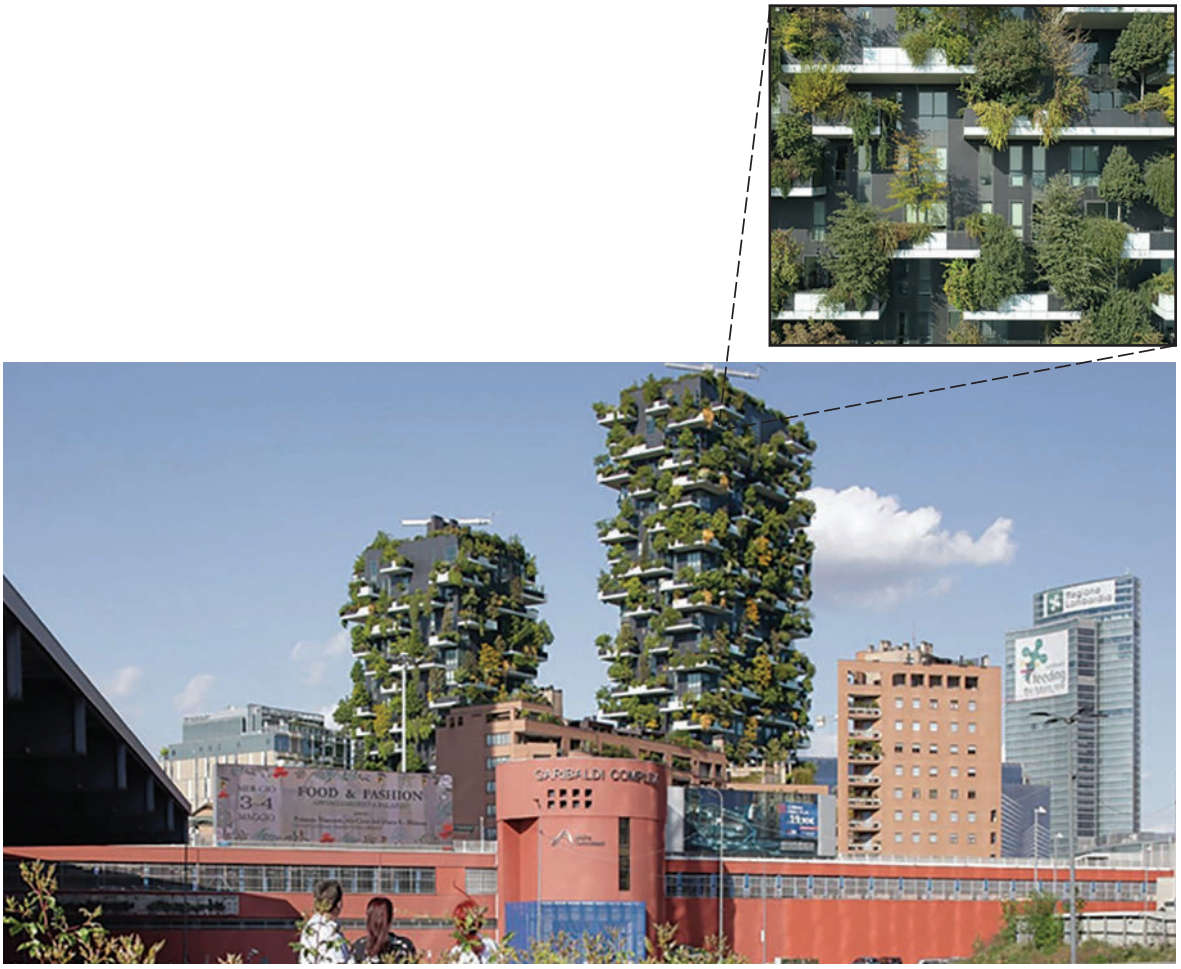
Study **Figure 2**, photographs of the Vertical Forest development in Milan, a city in Italy.

**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]**

_____

_____

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_____

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**Question 1 continues on the next page**

Do not write outside the box

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

Do not write outside the box

Study **Figure 4**, in the insert, a 1:50 000 Ordnance Survey map from the 1950s showing the same area of Aberdeen as **Figure 3**.

**0 1 . 7** Suggest how urban sprawl and the growth of commuter settlements have impacts on the rural-urban fringe.

Use **Figure 3** and **Figure 4** and your own understanding.

**[6 marks]**

Extra space

**Question 1 continues on the next page**

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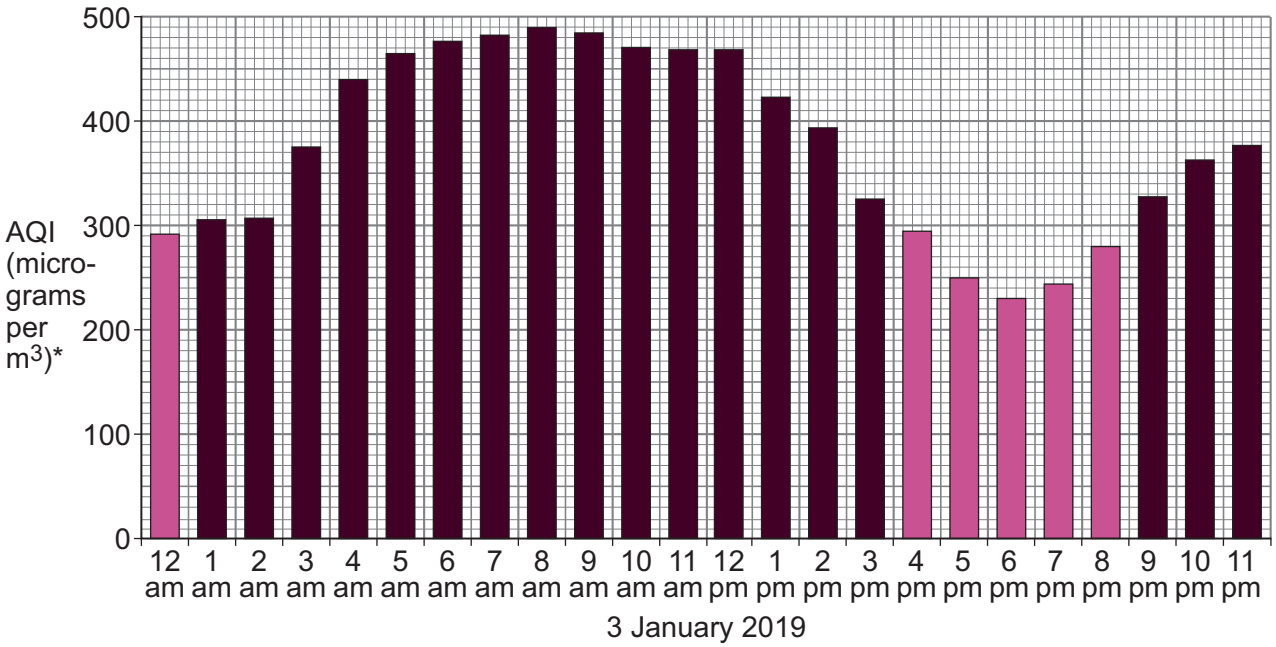
Study **Figure 5**, a graph showing air pollution for 24 hours on 3 January 2019 in New Delhi, a city in India.

**Figure 5**




*Air Quality Index (micrograms per cubic metre)

**Air Quality Index**

- **Good** (0 – 50)
- **Moderate** (51 – 100)
- **Unhealthy for sensitive groups** (101 – 150)
- **Unhealthy** (151 – 200)
- **Very unhealthy** (201 – 300)
- **Hazardous** (301 – 500)
- **Beyond index** (more than 500)

**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

Do not write outside the box

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

_____

_____

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_____

**Question 1 continues on the next page**

Do not write outside the box

**0 1 . 1 1** Assess the extent of the challenges created by urban growth in LICs/NEEs.

Use a case study of a city in an LIC/NEE.

**[9 marks]**
**[+ 3 SPaG marks]**

Name of LIC/NEE city _____

Extra space _____

Do not write outside the box

33

**End of Section A**

**Turn over for Section B**

Do not write outside the box

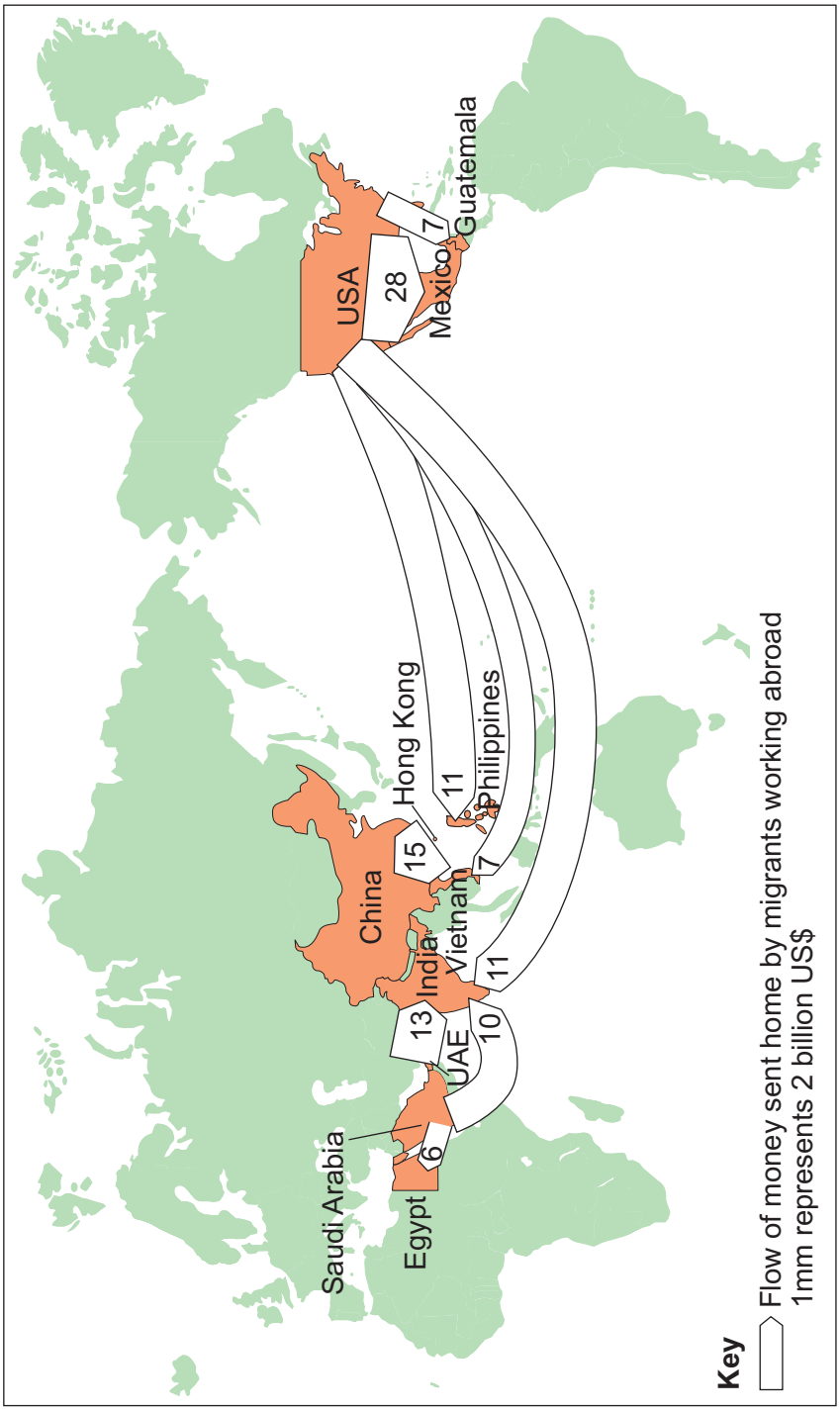
## Section B The changing economic world

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**



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**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 _____

_____

_____

_____

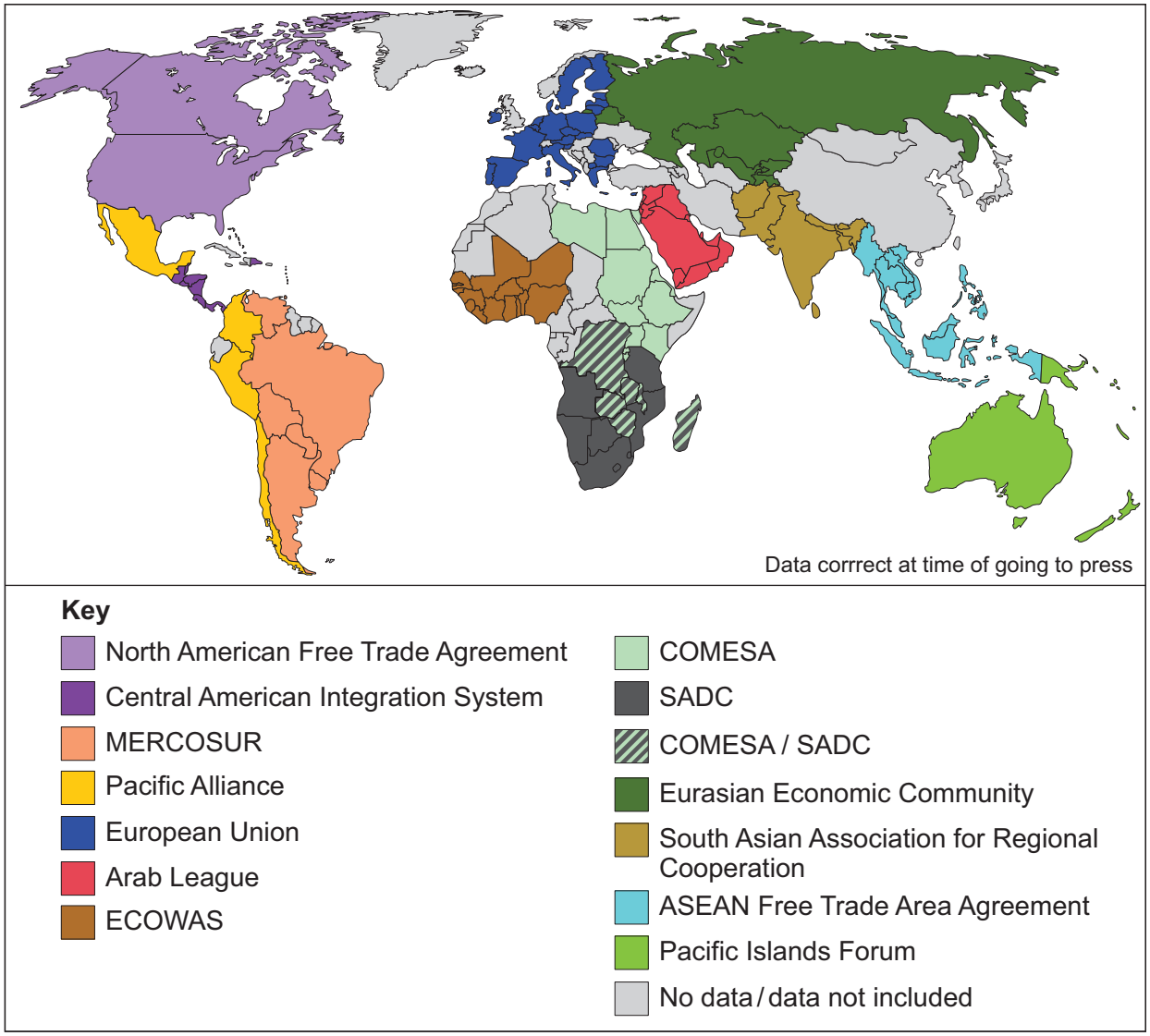
_____

**Question 2 continues on the next page**

Do not write outside the box

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]**

_____

Do not write outside the box

**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 _____

_____

_____

_____

_____

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_____

Extra space _____

_____

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**Question 2 continues on the next page**

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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]**

_____

_____

Do not write outside the box

**0 2 . 9** 'Aid is the best way to reduce the development gap.'

To what extent do you agree?

Use **Figure 8** and your own understanding.

**[6 marks]**

Extra space

**Question 2 continues on the next page**

Do not write outside the box

**0 2 . 1 0** Social and economic changes in the UK rural landscape are:

- positive in an area of population growth
- negative in an area of population decline.

Do you agree?

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

**[9 marks]**

Extra space

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30

**End of Section B**

**Turn over for Section C**

Do not write outside the box

## Section C The challenge of resource management

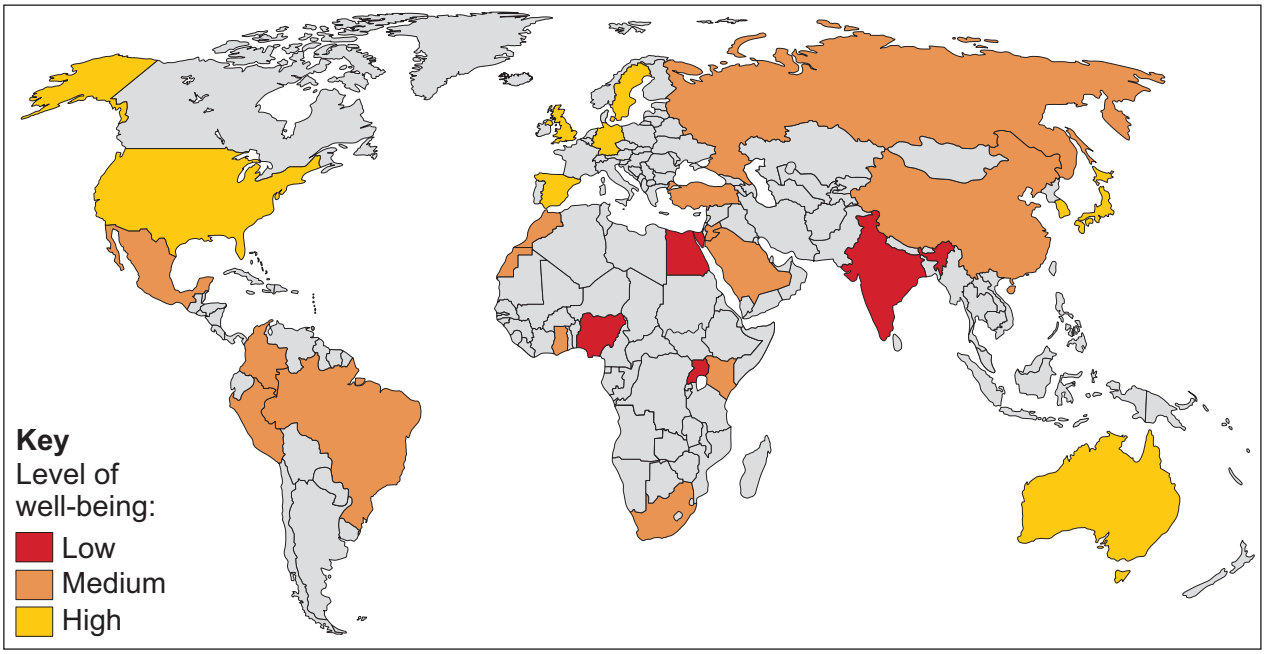
Answer **Question 3** and

**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]**

_____

_____

_____

_____

Do not write outside the box

**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**

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

**Figure 10a** shows the amount of carbon dioxide ($CO_2$) emitted to produce 1 kg of food.

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

**Figure 10a**

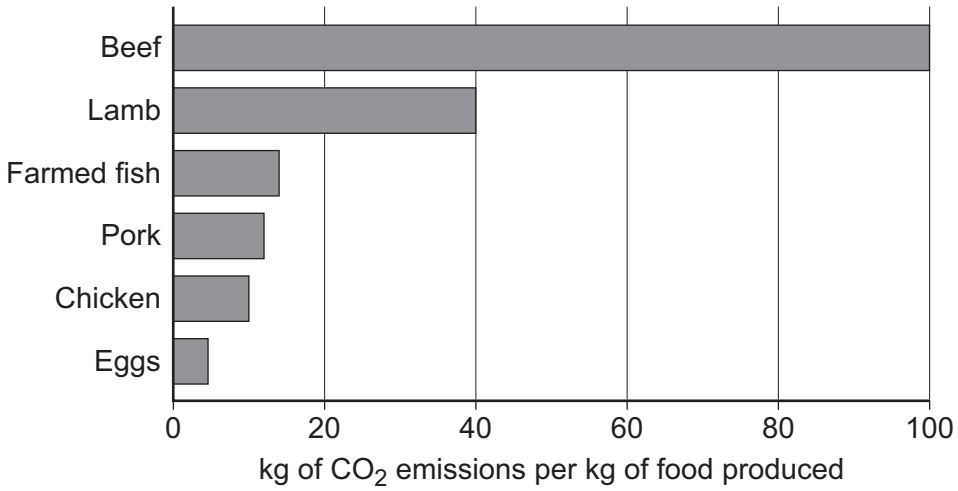


**Figure 10b**

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**0 3 . 4** '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**

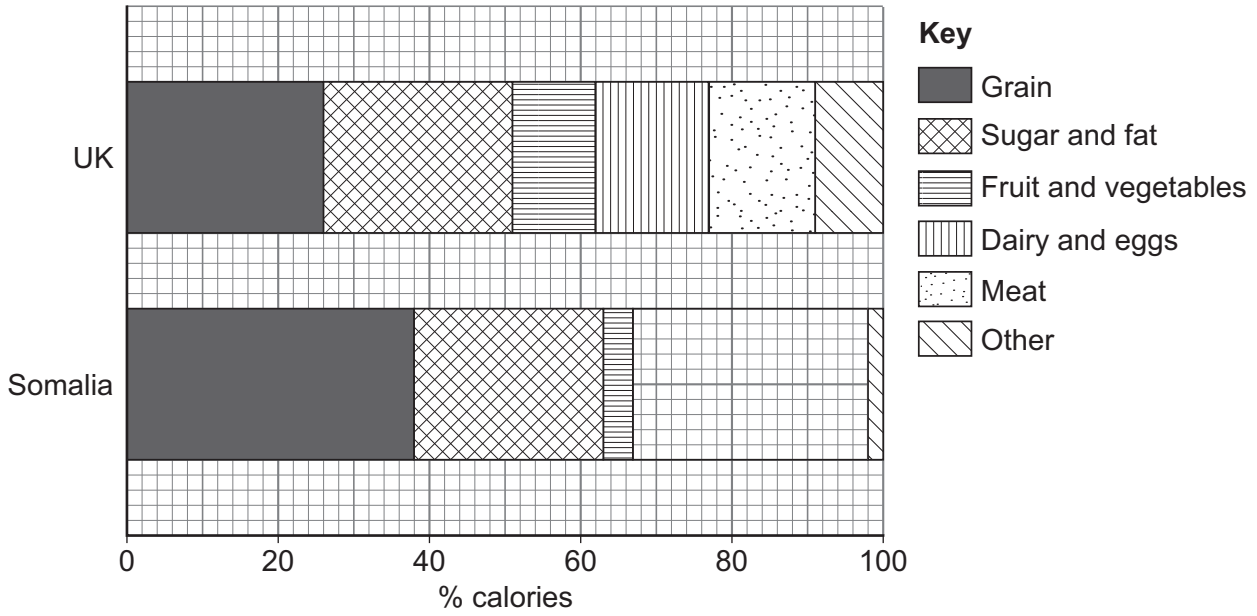
Do not write outside the box

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 _____

_____

Do not write outside the box

**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**

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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]**

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Extra space

13

**End of Question 4**

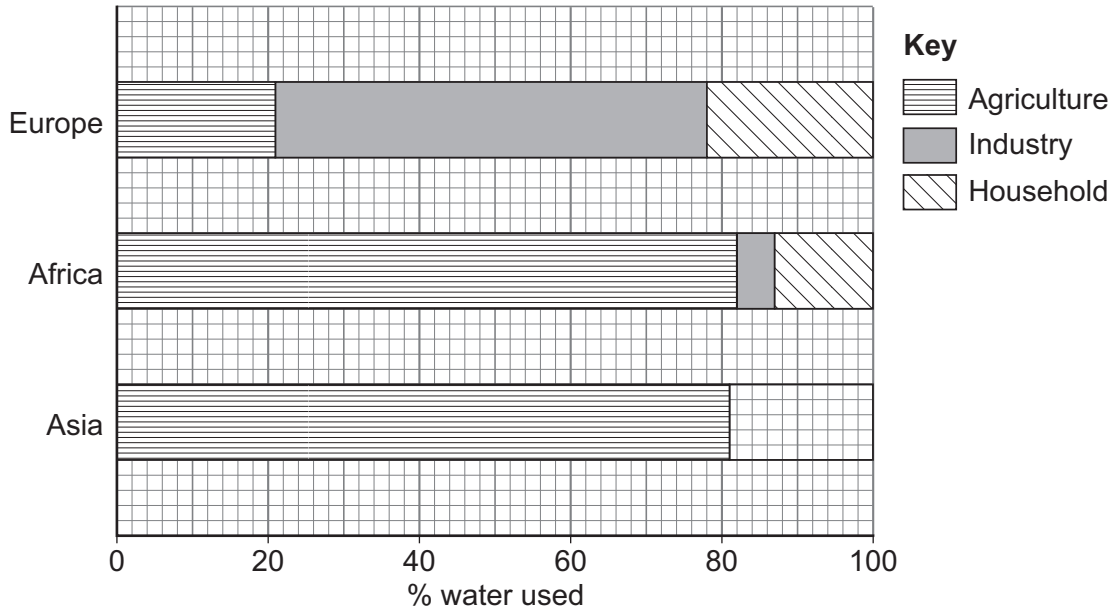
**If you have answered Question 4, do not answer Question 5 or 6**

Do not write outside the box

**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 _____

_____

Do not write outside the box

**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**

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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]**

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**End of Question 5**

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

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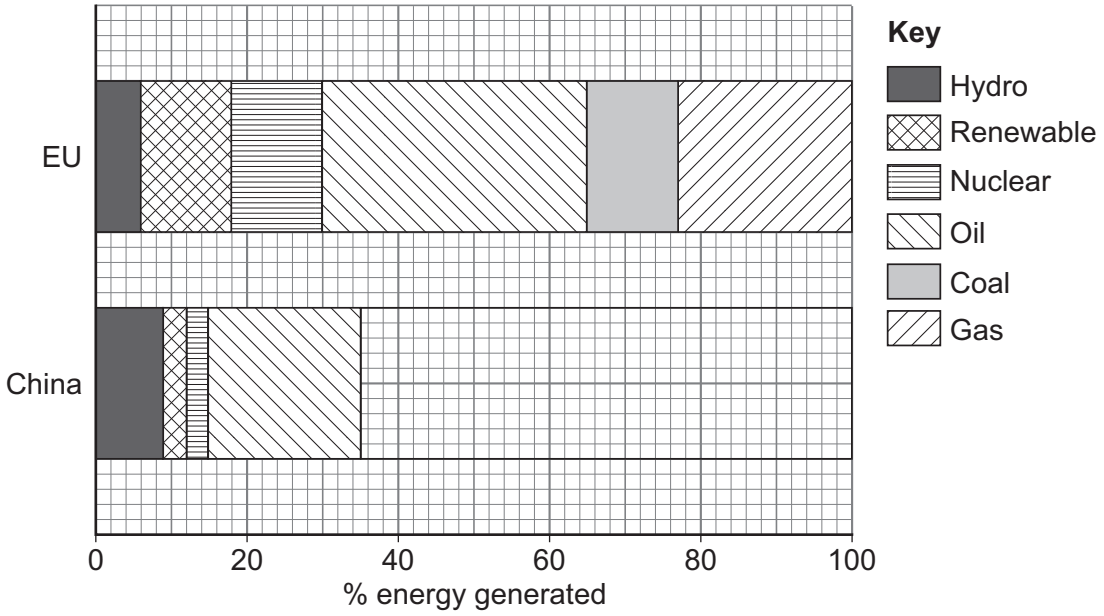
**Question 6 Energy**

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 _____

_____

Do not write outside the box

**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**

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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]**

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13

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

**END OF QUESTIONS**

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**ANSWER IN THE SPACES PROVIDED**

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