Please check the examination details below before entering your candidate information

Candidate surname	Other names

Centre Number | Candidate Number

Pearson Edexcel Level 1/Level 2 GCSE (9–1)

Friday 9 June 2023

Morning (Time: 1 hour 30 minutes)

Paper reference **1GA0/02**

Geography A

PAPER 2: The Human Environment

You must have:
Resource Booklet (enclosed), Calculator

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- In Section A and Section B answer **all** questions.
- In Section C answer **all** of Question 3 and **one** question from **either** Question 4 **or** Question 5.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- Where asked you must **show all your working out** with **your answer clearly identified** at the **end of your solution**.

Information

- The total mark for this paper is 94.
- The marks for **each** question are shown in brackets – *use this as a guide as to how much time to spend on each question.*
- The marks available for spelling, punctuation and grammar are clearly indicated.

Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.

Turn over

©2023 Pearson Education Ltd.
N:1/1/1/1/1/1

P 7 2 5 6 7 R A 0 1 2 4

Pearson

SECTION A

Changing Cities

Answer ALL questions in this section.

Write your answers in the spaces provided.

Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

1 The causes and effects of urbanisation can vary between countries at different levels of development.

(a) Study Figure 1a in the Resource Booklet.

(i) Identify the percentage (%) of Australia's total population living in urban areas.

(1)

☐ **A** Between 10% and 20%

☐ **B** Between 20% and 30%

☐ **C** Between 30% and 40%

☐ **D** Between 80% and 90%

(ii) Name the country labelled on Figure 1a that has between 50% and 60% of its total population living in urban areas.

(1)

.....

(iii) Explain **one** reason why some countries have low percentages (%) of their population living in urban areas.

(2)

.....

.....

.....

.....

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

(b) Study Figure 1b in the Resource Booklet.

Compare the changes in the urban populations of Asia and North America between 1950 and 2020.

(3)

.....

.....

.....

.....

.....

.....

(c) Explain **one** reason why suburbanisation has taken place in the UK.

(2)

.....

.....

.....

.....

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

The city of Kolkata is in India, an emerging country.

(d) Study Figure 1c below.

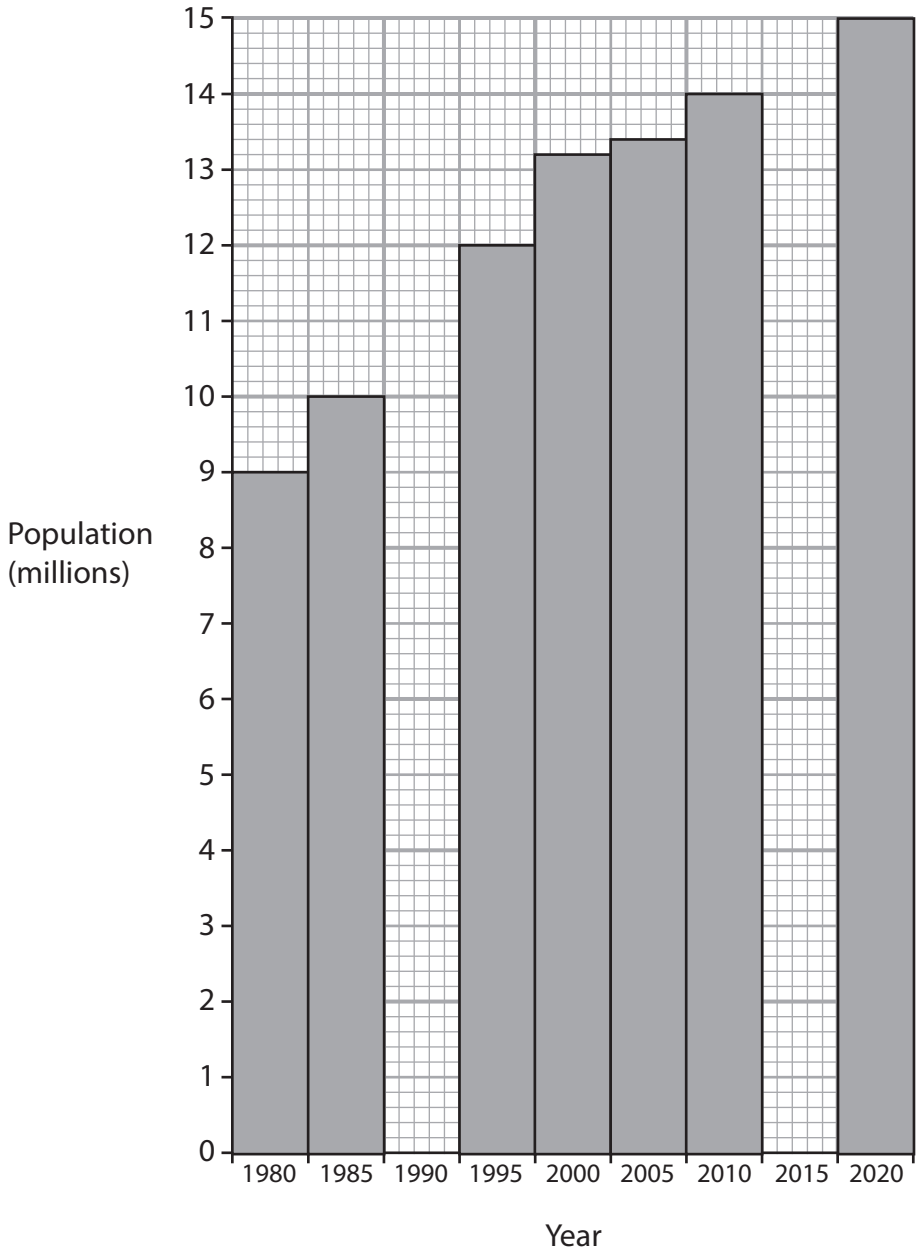


Figure 1c

Population growth of Kolkata between 1980 and 2020

(i) Complete Figure 1c by plotting the data from the table below.

(2)

Year	Population (millions)
1990	11.0
2015	14.4

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

(ii) Identify the period when Kolkata's population increased by 1.2 million.

(1)

☒ **A** 1980 to 1985

☒ **B** 1995 to 2000

☒ **C** 2000 to 2005

☒ **D** 2005 to 2010

(iii) Calculate the percentage increase in the population of Kolkata between 1980 and 2020.

Write your answer to one decimal place.

You must show your working in the space below.

(2)

..... %

(e) Study Figure 1d in the Resource Booklet.

(i) Name the river that flows through Kolkata.

(1)

.....

(ii) Suggest **two** reasons why Kolkata has had rapid population growth.

You must use evidence from Figure 1d in your answer.

(4)

1 .....

.....

.....

.....

2 .....

.....

.....

.....

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

(iii) Suggest **one** negative environmental impact of rapid population growth in Kolkata.

Use evidence from Figure 1d in your answer.

(3)

.....

.....

.....

.....

.....

.....

(f) You have studied a major UK city.

Assess the impacts of recent changes in retailing on this city.

(8)

Named UK city

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

(Total for Question 1 = 30 marks)

TOTAL FOR SECTION A = 30 MARKS

SECTION B

Global Development

Answer ALL questions in this section.

Write your answers in the spaces provided.

Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

2 International trade has influenced the development of many developing and emerging countries, such as Guyana.

(a) Study Figure 2a and Figure 2b below.

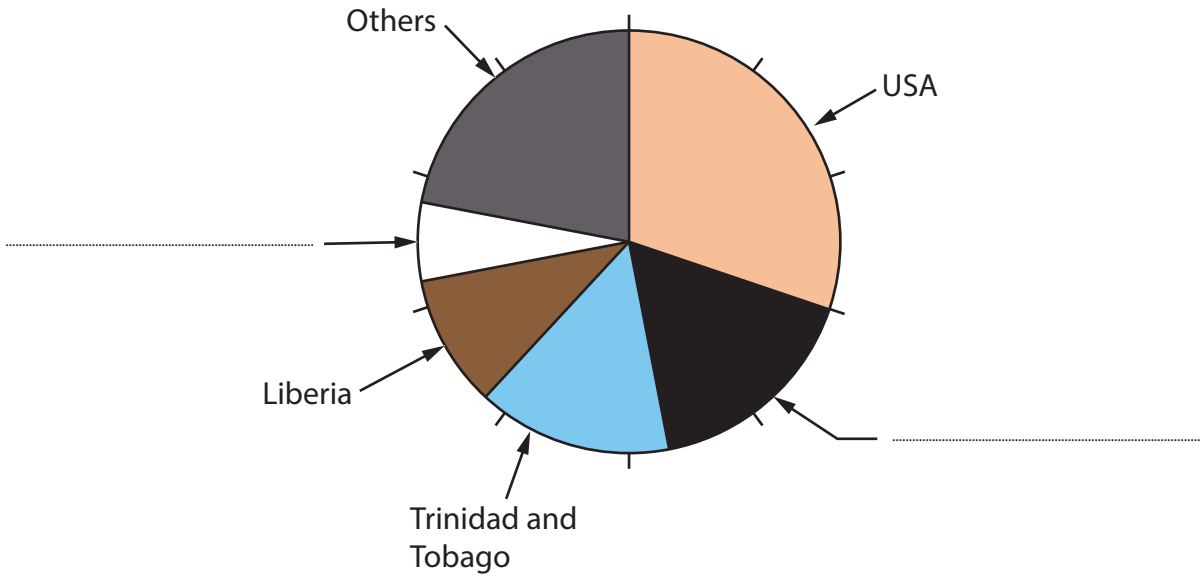


Figure 2a

Countries that provided Guyana's imports (goods coming into Guyana) in 2019

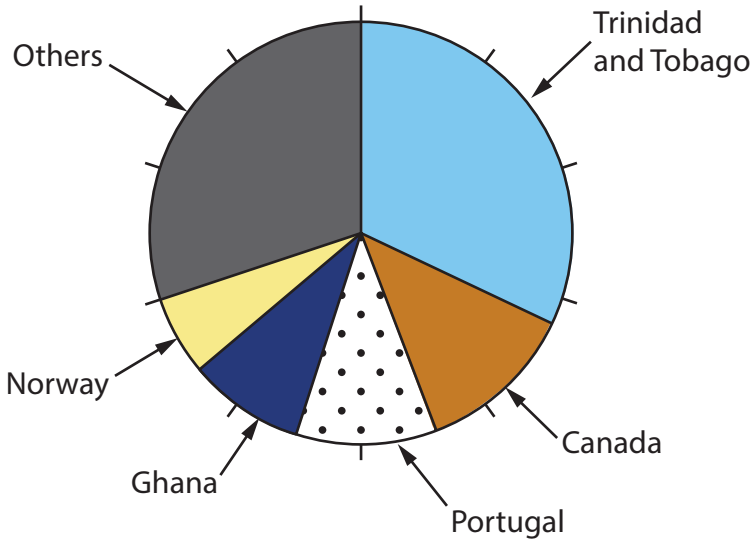


Figure 2b

Countries where Guyana sold its exports (goods leaving Guyana) in 2019

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

(i) Label Figure 2a, by using the information in the table below, to complete the pie chart.

(1)

Country sending imports	Percentage (%) of Guyana's imports
Singapore	17
UK	6

(ii) Calculate the total percentage of Guyana's imports that came from Liberia and the USA.

(1)

☒ **A** 10%

☒ **B** 20%

☒ **C** 30%

☒ **D** 40%

(iii) Name the country that received the largest percentage of Guyana's exports.

(1)

.....

(iv) State **two** ways that international trade may help a country to develop.

(2)

1 .....

.....

2 .....

.....

(b) Explain **one** way a geopolitical relationship has affected the development of a named developing or emerging country.

(2)

Named country

.....

.....

.....

.....

.....

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

(c) Explain **two** physical factors that have led to some countries having a high level of development.

(4)

1 .....

.....

.....

.....

2 .....

.....

.....

.....

(d) Study Figure 2c in the Resource Booklet.

(i) Calculate the mean life expectancy for the countries shown on Figure 2c.

Write your answer to one decimal place.

You must show your working in the space below.

(2)

..... years

(ii) Describe the relationship between GNI per capita and life expectancy shown in Figure 2c.

(3)

.....

.....

.....

.....

.....

.....

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

(iii) Identify **two** reasons why life expectancy has increased in some countries over the last 30 years.

(2)

☒ **A** Advances made in the treatment of some diseases

☒ **B** Fewer safety measures are taken in the workplace

☒ **C** Increased access to safe drinking water

☒ **D** Decrease in food security

☒ **E** Higher rate of unemployment

(iv) Figure 2c includes two measures used to calculate the Human Development Index (HDI) for a country.

State **one** other measure used in the calculation of the HDI.

(1)

.....

(e) Explain **one** way that investment by transnational corporations (TNCs) has increased the development of some developing and emerging countries.

(3)

.....

.....

.....

.....

.....

.....

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

(f) Assess the importance of historical and economic factors in the development of countries.

(8)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

.....

.....

.....

.....

(Total for Question 2 = 30 marks)

TOTAL FOR SECTION B = 30 MARKS

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

SECTION C

Resource Management

Answer all parts of Question 3.

Write your answers in the spaces provided.

Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

3 The environment provides natural resources that can be used to meet human needs.

(a) Define the term **biotic**.

(1)

.....

.....

(b) Explain **one** reason why fossil fuels are non-renewable.

(2)

.....

.....

.....

.....

(c) Name **one** area of the UK where most of the agriculture is arable farming (growing crops).

(1)

.....

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

(d) Study Figure 3 in the Resource Booklet.

(i) Identify the **two** correct statements about soya farming.

(2)

☒ **A** The UK imports soya from Argentina

☒ **B** Soya is low in protein and vegetable oils

☒ **C** The demand for soya in the UK is falling

☒ **D** Soya is only used in the production of food for people

☒ **E** Large areas of flat land are needed for soya farming

(ii) Calculate the number of tonnes of soya imported by the UK from South America last year, using the data in Figure 3.

You must show your working in the space below.

(2)

..... tonnes

(iii) Suggest **one** negative impact of soya farming on the environment.

Use evidence from Figure 3 in your answer.

(2)

.....

.....

.....

.....

(Total for Question 3 = 10 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

Answer EITHER Question 4 OR Question 5.

Energy Resource Management

Spelling, punctuation, grammar and use of specialist terminology will be assessed in Question 4(e)

If you answer Question 4, put a cross in the box ☒ .

4 (a) Define the term **energy mix**.

(1)

.....

.....

Different resources are being developed to meet the growing demand for energy.

(b) Study Figure 4 in the Resource Booklet.

(i) Identify the energy resource that had a consumption of 100 quadrillion Btu in 2005.

(1)

☒ **A** natural gas

☒ **B** oil

☒ **C** renewables

☒ **D** uranium

(ii) Calculate the increase in consumption of coal (quadrillion Btu) between 1990 and 2020.

(1)

☒ **A** 30

☒ **B** 70

☒ **C** 110

☒ **D** 150

(iii) Name the energy resource with a predicted increase of 30 quadrillion Btu.

(1)

.....

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

(iv) State **one** possible reason for the predicted trend in consumption of renewables between 2020 and 2040.

(1)

.....

.....

(c) Describe **one** method that could be used to collect different views about the sustainable use of energy resources.

(3)

.....

.....

.....

.....

.....

.....

(d) Explain **two** reasons why the global demand for energy has increased over the last 100 years.

(4)

1 .....

.....

.....

.....

2 .....

.....

.....

.....

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

In this question, up to four additional marks will be awarded for your spelling, punctuation, grammar and use of specialist terminology.

(e) Evaluate the extent to which fracking can meet the future demand for energy.

(8)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

.....

.....

.....

.....

.....

(Spelling, punctuation, grammar and use of specialist terminology = 4 marks)

(Total for Question 4 = 24 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

Do not answer Question 5 if you have answered Question 4.

Water Resource Management

Spelling, punctuation, grammar and use of specialist terminology will be assessed in Question 5(e)

If you answer Question 5, put a cross in the box ☒ .

5 (a) Define the term **water surplus**.

(1)

.....

.....

Water consumption patterns around the world have changed over time.

(b) Study Figure 5 in the Resource Booklet.

(i) Identify the total water consumption (km^3/year) by all sectors in 2010.

(1)

☒ **A** 600

☒ **B** 1,400

☒ **C** 2,000

☒ **D** 2,300

(ii) Calculate the increase in water consumption by agriculture (km^3/year) between 1990 and 2020.

(1)

☒ **A** 200

☒ **B** 650

☒ **C** 1,100

☒ **D** 1,550

(iii) Name the sector with the smallest predicted change between 2020 and 2040.

(1)

.....

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

(iv) State **one** possible reason for the trend in domestic water consumption between 1990 and 2020.

(1)

.....

.....

(c) Describe **one** method that could be used to collect different views about the sustainable use of water resources.

(3)

.....

.....

.....

.....

.....

.....

(d) Explain **two** reasons why some parts of the world have a limited supply of fresh water.

(4)

1 .....

.....

.....

.....

2 .....

.....

.....

.....

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

In this question, up to four additional marks will be awarded for your spelling, punctuation, grammar and use of specialist terminology.

(e) Evaluate the extent to which desalination can meet the future demand for water.

(8)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

.....

.....

.....

.....

.....

(Spelling, punctuation, grammar and use of specialist terminology = 4 marks)
(Total for Question 5 = 24 marks)

TOTAL FOR SECTION C = 34 MARKS
TOTAL FOR PAPER = 94 MARKS

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

BLANK PAGE

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

Pearson Edexcel Level 1/Level 2 GCSE (9–1)

Friday 9 June 2023

Morning (Time: 1 hour 30 minutes)

Paper reference **1GA0/02**

Geography A

PAPER 2: The Human Environment

Resource Booklet

Do not return this Booklet with the question paper.

Turn over

P72567RA

©2023 Pearson Education Ltd.
N:1/1/1/1/1/1

P 7 2 5 6 7 R A

Pearson

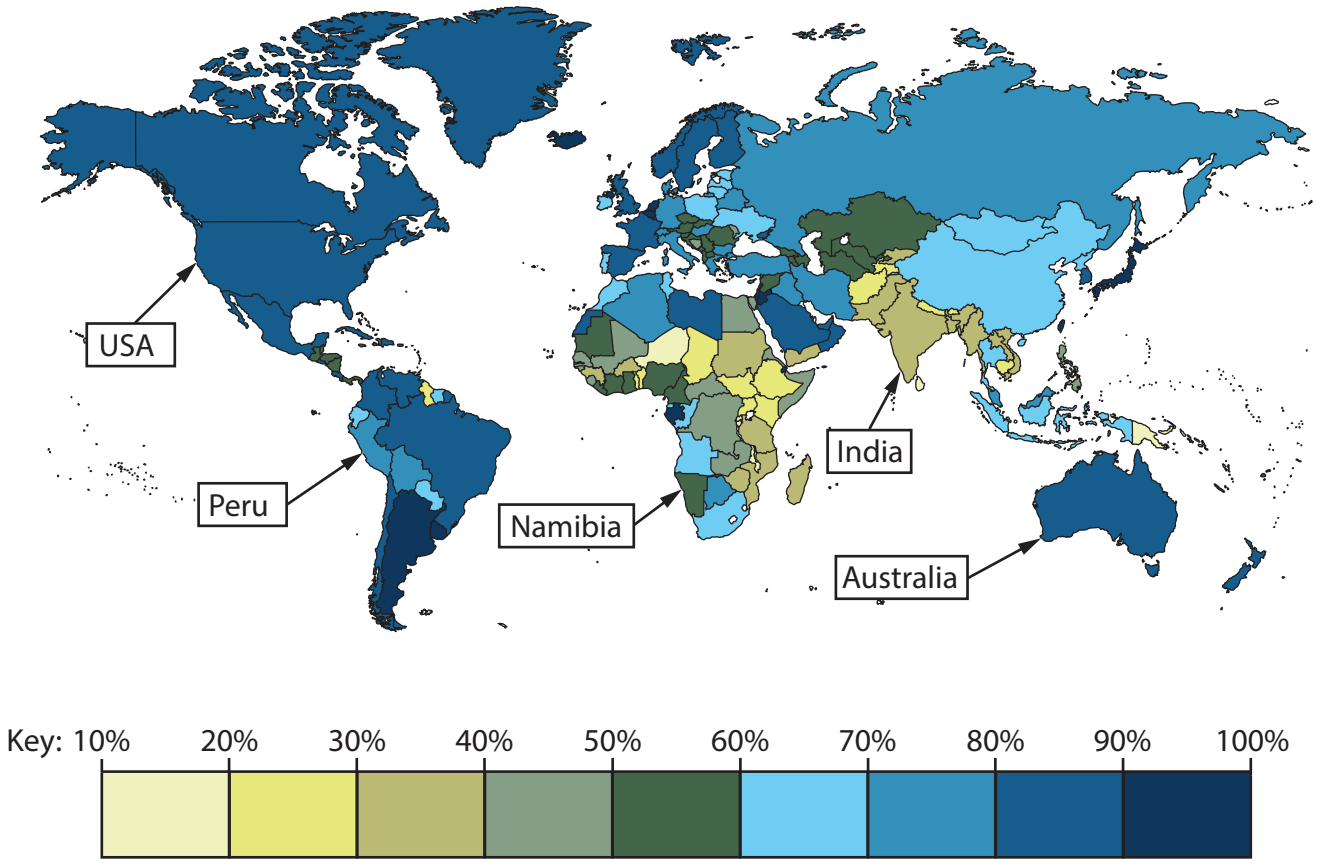


Figure 1a

Global differences in the percentage (%) of the population living in urban areas

Region	1950	2020
Asia	**17.5**	**51.1**
North America	**63.9**	**83.6**

Figure 1b

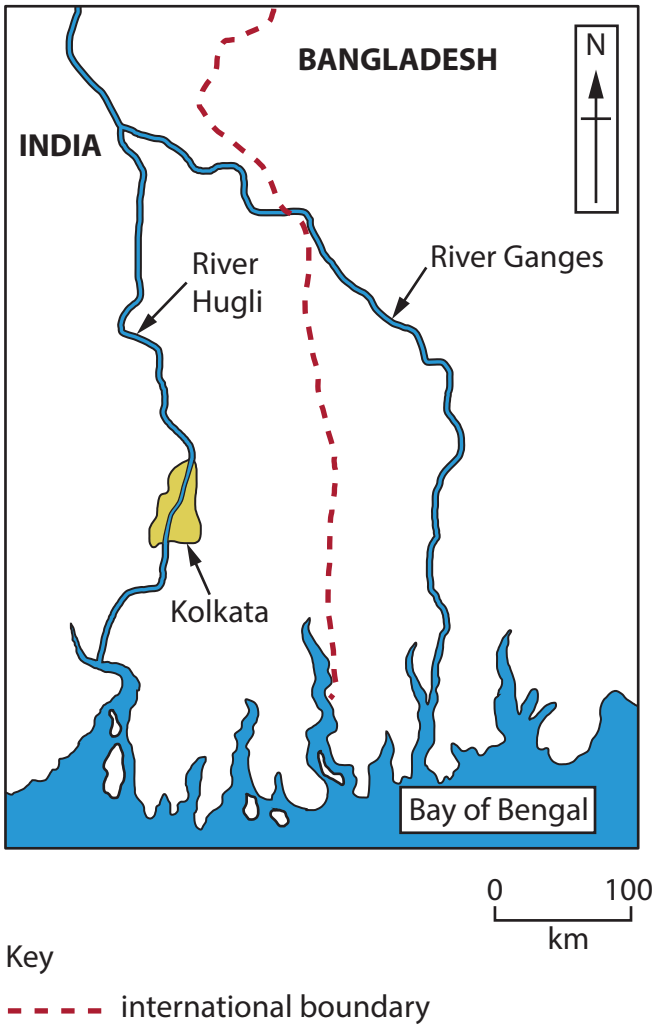
Percentage (%) urban population for selected regions in 1950 and 2020

Rural areas in the north of India suffer from soil erosion and an extreme climate, with a long, dry season.

Rapid population growth has led to large squatter settlements / informal housing developing on the outskirts of Kolkata.

Kolkata has much better medical and education services than the surrounding rural areas.

The New Town area of Kolkata has received money from India's government as part of the 'Smart Cities Mission' to improve urban areas.



There is a large proportion of adults aged 18 to 30 living in Kolkata.

The coastal area around the Bay of Bengal is very flat and low-lying.

Figure 1d

Information about why Kolkata, a major city in India, has had rapid population growth since 1980

Country	GNI per capita (US$)	Life expectancy (years)
Belarus	**18,546**	**74.8**
Hungary	**31,326**	**76.9**
Italy	**42,776**	**83.5**
Romania	**29,497**	**76.1**
Singapore	**88,155**	**83.6**
Switzerland	**69,394**	**83.8**

Figure 2c

Information about Gross National Income (GNI) per capita and life expectancy for selected countries in 2020

This photograph shows an area where deforestation is creating space for soya farming. Deforestation often involves burning the trees after they have been cut down.

The UK imported 3 million tonnes of soya last year. 70% comes from South American countries including Brazil, Argentina and Paraguay.

The demand for soya in the UK is increasing and this is having a negative impact on the global environment.

Soya has become a very popular choice of crop and is a key source of protein and vegetable oils. Most of it is used in the production of animal feed.

Figure 3

Information about soya farming

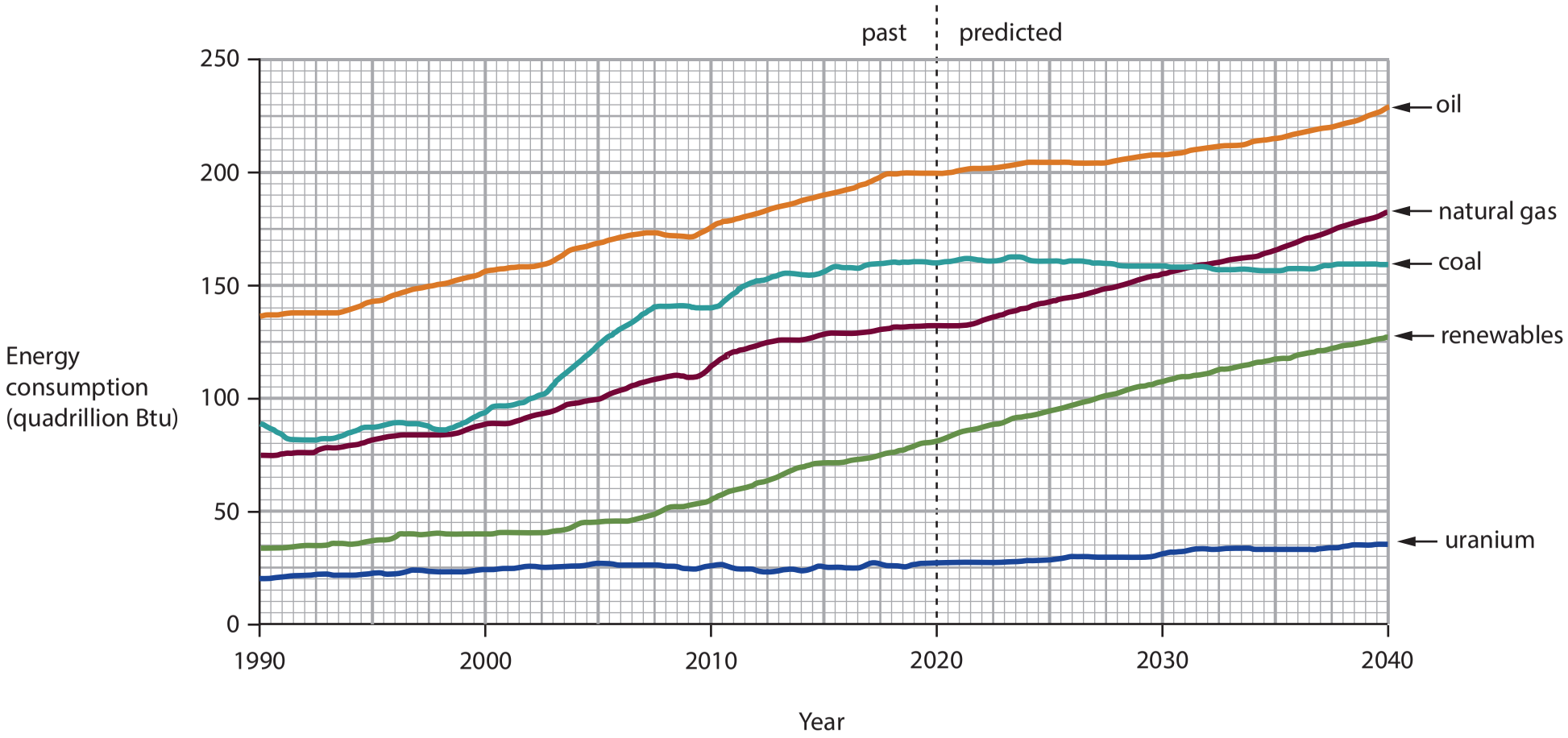


Figure 4

Past and predicted global consumption (quadrillion Btu) of energy resources, 1990–2040

P72567RA

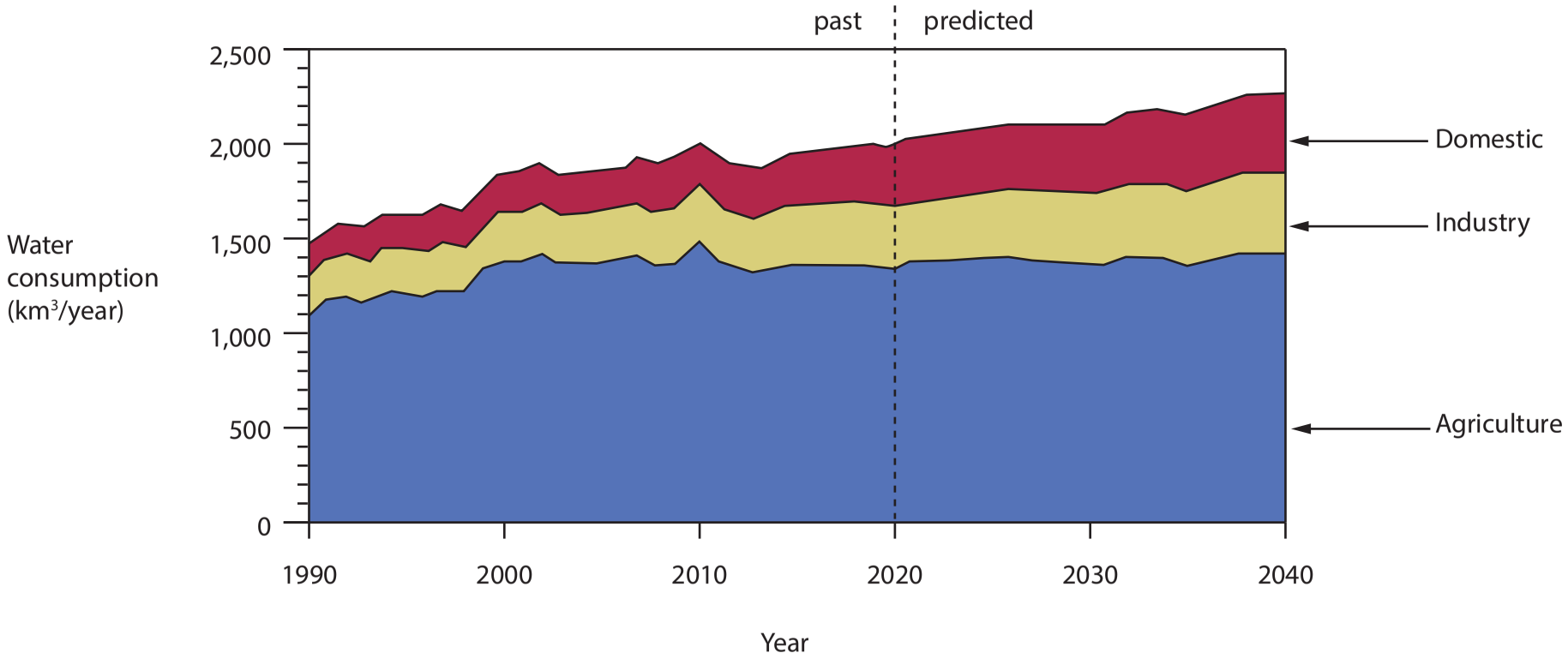


Figure 5

Past and predicted global water consumption (km^3/year) for the domestic, industrial and agricultural sectors, 1990–2040

BLANK PAGE

Acknowledgements

Pearson Education Ltd. gratefully acknowledges all the following sources used in the preparation of this paper:

Figure 1a https://ourworldindata.org/grapher/urban-population-share-2050?time=2021

Figure 1b https://www.statista.com/chart/23349/share-of-urban-population-by-continent

Figure 1c https://populationstat.com/india/calcutta

Figure 2a https://wits.worldbank.org/CountryProfile/en/Country/GUY/Year/2019/TradeFlow/Import/Partner/all/Product/Total

Figure 2b https://wits.worldbank.org/CountryProfile/en/Country/GUY/Year/2019/TradeFlow/Export/Partner/all/Product/Total

Figure 2c http://www.hdr.undp.org/en/data

Figure 3 https://www.theguardian.com/global-development/gallery/2011/jun/01/global-food-crisis-soy-in-pictures#img-2

Figure 4 https://www.breakbulk.com/Articles/eia-predicts-global-energy-demand-growth

Figure 5 https://gcos.wmo.int/en/essential-climate-variables/water-use/