Surname		Centre Number	Candidate Number
First name(s)			0

wjec cbac

eduqas Part of WJEC

GCSE

C111U20-1

S23-C111U20-1

FRIDAY, 9 JUNE 2023 – MORNING

GEOGRAPHY A – Component 2
Environmental and Developmental Issues

1 hour 30 minutes

For Examiner's use only

Question	Maximum Mark	Mark Awarded
1	34	
2	34	
SPaG	4	
either 3	16	
or 4	16	
Total	88	

ADDITIONAL MATERIALS

Resource Folder.

In addition to this paper you may use a calculator and a ruler if required.

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen. Do not use gel pen or correction fluid.

You may use a pencil for graphs and diagrams only.

Write your name, centre number and candidate number in the spaces at the top of this page.

Answer **both** questions in Section A.

Answer **one** question in Section B.

Write your answers in the spaces provided in this booklet.

Additional space is provided for some questions within the booklet (if required). If further space is required for any question, you should use the additional page(s) at the end of this booklet. The question number(s) should be clearly shown.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets [ ] at the end of each question or part-question.

Your ability to spell, punctuate and use grammar and specialist terminology accurately will be assessed in your answer to Question **2**(d).

JUN23C111U20101

© WJEC CBAC Ltd.

LE/GR*(X23-C111U20-1)

C111U201 01

SECTION A: CORE THEMES

Answer **all** questions in this section.

THEME 5: Weather, Climate and Ecosystems

1. (a) Study **Graphs 1.1** and **1.2** below.

Graph 1.1 – Percentage of average rainfall in June and July for UK regions in 2018
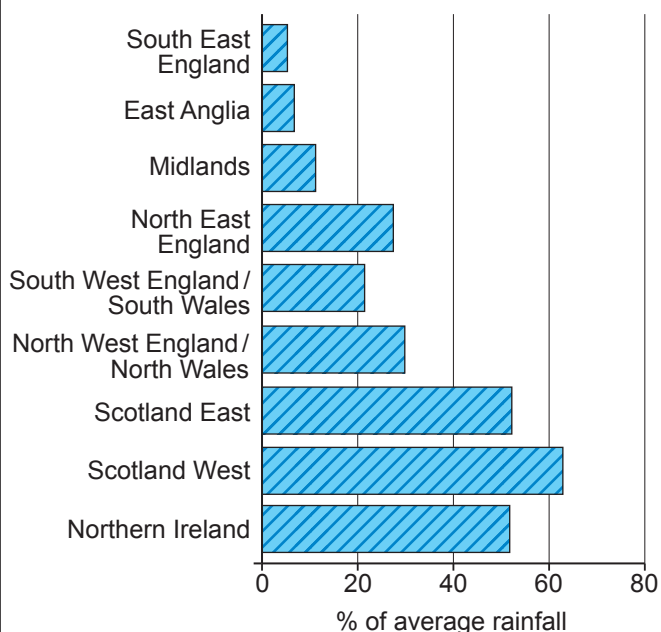
Graph 1.2 – Average high temperature in July for UK regions in 2018
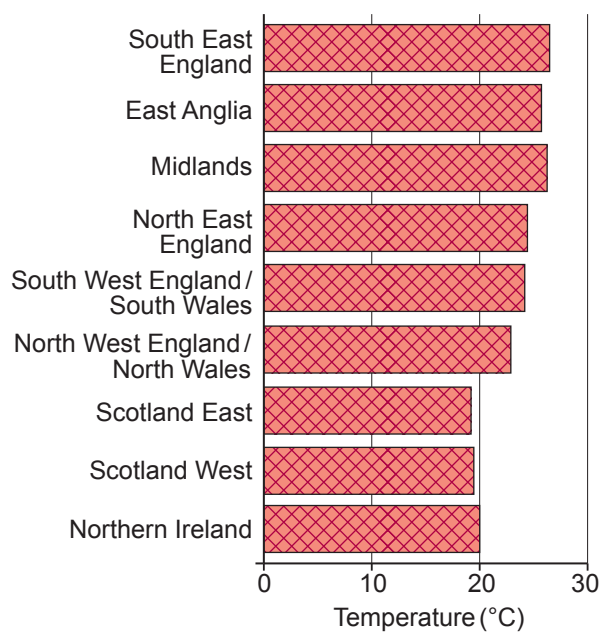
Read the statements in the box below.

(i) Tick (✓) the **two** correct statements. [2]

	Tick (✓)
The lowest percentages of average rainfall were in South East England and East Anglia.	
Scotland West received 70% of average rainfall.	
South East England received 10% of average rainfall.	
Most regions of the UK had average high temperatures of over 20°C.	
Northern Ireland was the coolest region.	

(C111U20-1)

(ii)   Suggest an alternative technique to represent the information shown on
        Graphs 1.1 and **1.2**.   [1]

....

....

(iii)   Give **two** impacts of high-pressure hazards on people.   [2]

Impact 1: ....

Impact 2: ....

(iv)   Give **one** reason why high-pressure hazards have impacts on the environment.
                                                                                           [2]

....

....

....

....

(v)   In the UK, low pressure brings different weather conditions to high pressure.
        Explain why.   [6]

....

....

....

....

....

....

....

....

....

....

....

Turn over.

Additional space for **1**(a)(v) only:

....

....

....

....

....

(vi)   Give **one** reason why weather conditions vary in different parts of the UK.   [2]

....

....

....

....

(b)   (i)   Define biodiversity.   [1]

....

....

(ii)   Describe **two** ways human activity in ecosystems can have an impact on biodiversity.   [4]

Way 1: ....

....

Way 2: ....

....

(iii)   Give **one** strategy which can be used to manage biodiversity.   [1]

....

....

   (C111U20-1)

(c)   Study **OS Map 1.3** in the **Resource Folder**.

(i)   Complete the paragraph to describe the location of the wind farm, choosing the correct answers from the box below.   [3]

The wind farm is found to the .... of the A1 road. Much of

the wind farm is located in grid square .... The woodland to

the west of Langford is approximately .... kilometres from the

wind farm.

| East | West | North | 2141 | 2041 | 2040 | 4 | 2 | 5 |

(ii)   Study **Graph 1.4** below.

Graph 1.4 – Energy production in the UK in 2020
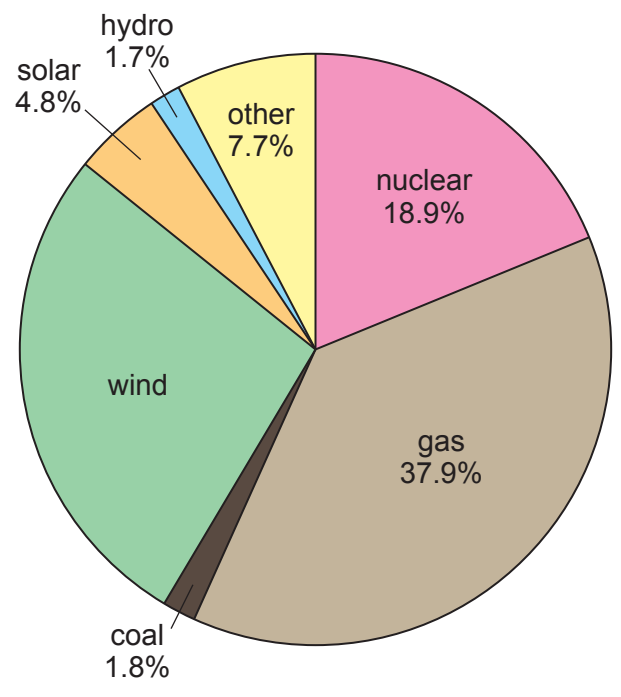
Calculate the percentage of energy generated by wind in the UK in 2020.
Show your working.   [2]

Answer: .... %

© WJEC CBAC Ltd.   (C111U20-1)   **Turn over.**

C111U201
05

(iii)   Study the information in **Resource Box 1.5** and the **OS Map 1.3** in the **Resource Folder**.

Resource Box 1.5

The wind farm near Biggleswade

- There are 10 wind turbines at Biggleswade wind farm.
- They provide electricity for approximately 11 000 homes.
- This project will reduce the amount of CO_2 produced by an estimated 30 000 tonnes.
- Wind power is one of the cheapest renewable energy sources.

Nature reserve near Biggleswade in grid square 1840

- The nature reserve near Biggleswade is an important habitat for many rare birds and other wildlife.

To what extent does energy production have negative impacts on the environment near Biggleswade?
Use evidence from **Resource Box 1.5** and the **OS Map 1.3**.   [8]

....

....

....

....

....

....

....

....

Additional space for question **1**(c)(iii) only:

End of Question 1

(C111U20-1)

Turn over.

THEME 6: Development and Resource Issues

2. (a) (i) Tick (✓) the correct definition of GNI from the table below. [1]

	Tick (✓)
Gross National Inequality	
Great National Income	
Gross National Income	

Study **Graph 2.1** below.

Graph 2.1 – GNI in Brazil and the UK between 1960 and 2020
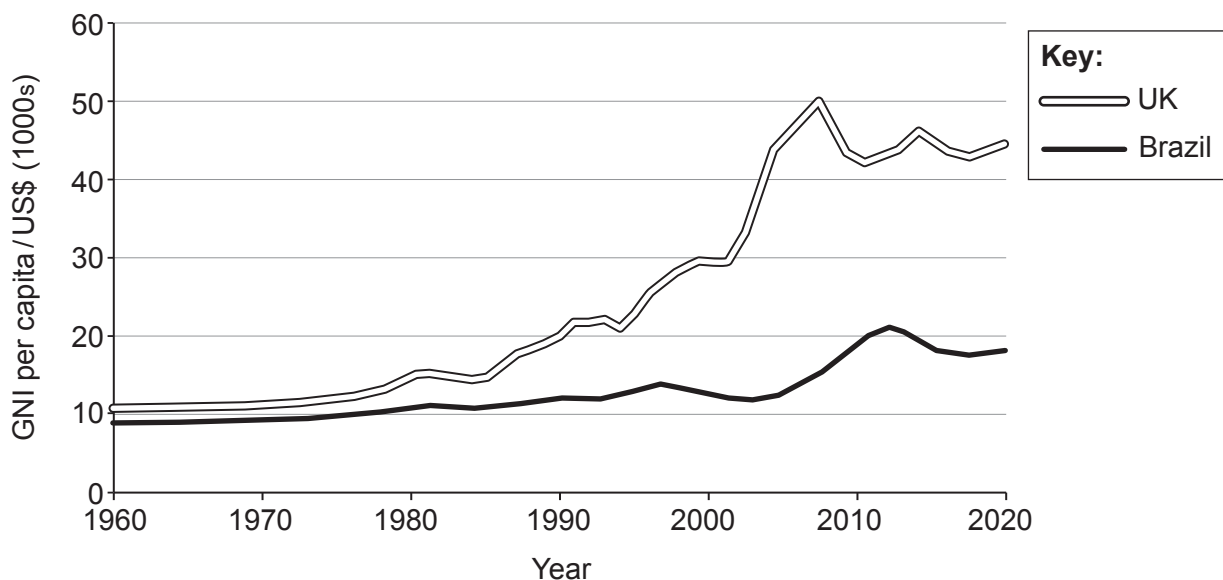
(ii) Describe the similarities and differences in GNI between Brazil and the UK. [3]

....

....

....

....

....

....

(C111U20-1)

(iii)   Give **one** way in which **Graph 2.1** could be improved.   [1]

....

....

(iv)   Explain why using economic measures of development has limitations.   [4]

....

....

....

....

....

....

....

....

(b)   (i)   Choose the correct definition for each of the following terms.

Write the correct **letter** in the box below.   [4]

Trade	A
Trade Bloc	B
Imports	C
Exports	D

Definition	Letter
Goods and services which are bought from other countries.	
A group of countries that work together to promote trade.	
Buying and selling of goods and services.	
Goods and services sold to other countries.	

© WJEC CBAC Ltd.   (C111U20-1)   **Turn over.**

Study **Map 2.2** below.

Map 2.2 – Main trading partners for each region in Brazil, 2017

(ii)   Give **two** conclusions you can draw about trade in Brazil from **Map 2.2**.   [2]

Conclusion 1: ....

....

Conclusion 2: ....

....

(iii) International trade can have an impact on development in LICs and/or NICs. Explain why. [4]

....

....

....

....

....

....

....

....

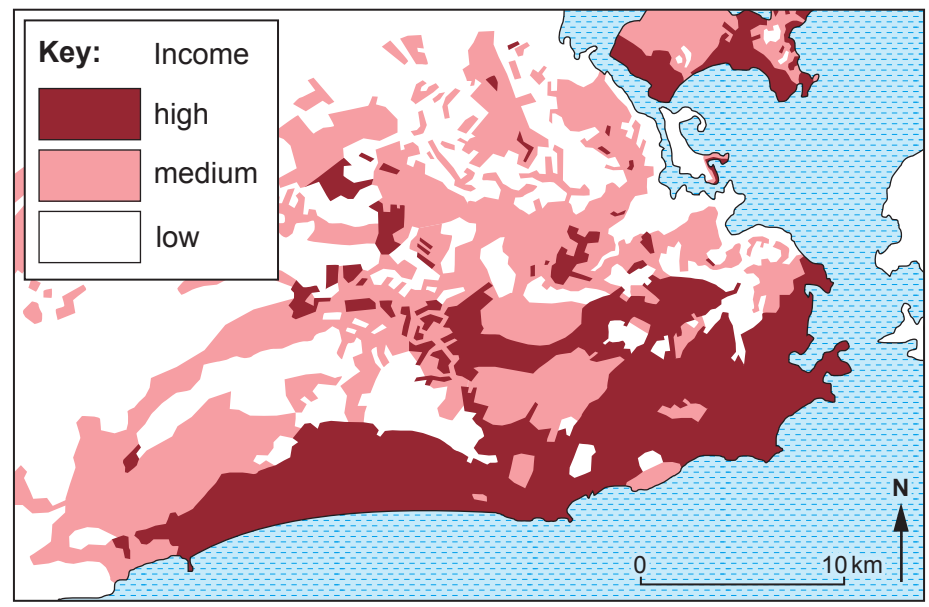© WJEC CBAC Ltd.   (C111U20-1)   **Turn over.**

(c)   Study **Map 2.3** below.

Map 2.3 – Income per household in Rio de Janeiro, a large city in Brazil

(i)   Describe the pattern of household income shown on **Map 2.3**.   [2]

....

....

....

....

(ii)   Give **one** reason why there are inequalities within countries.   [2]

....

....

....

....

(iii) Give **three** social consequences of inequality. [3]

1. ....

....

2. ....

....

3. ....

....

© WJEC CBAC Ltd. (C111U20-1) **Turn over.**

(d)   Study **Resource Box 2.4**.

Resource Box 2.4 – Information about water resources in Brazil

The Guandu Water Treatment Plant near Rio de Janeiro

- The Guandu Water Treatment Plant is the largest in the world.
- It provides 92% of drinking water for Rio de Janeiro.
- The cost of water treatment is US$ 40 million per year.
- The treatment plant is struggling to cope with increasing water quality problems.

Waste water in a residential area of Rio de Janeiro

- Due to increased demand Rio's water supply will have to increase by 50% by 2030.
- Brazil is the world's largest source of water. It has 13% of all fresh water and 20% of all groundwater.
- Deforestation in Brazil is causing soil erosion which is filling reservoirs with sediment instead of water.
- Replanting the forest could save US$79 million in water treatment costs.

The demand for water in Rio de Janeiro can be easily managed. How far do you agree?
[8]

Your ability to spell, punctuate and use grammar and specialist terminology accurately
will be assessed in your answer to this question. [4]

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

C111U201
15

© WJEC CBAC Ltd. (C111U20-1) **Turn over.**

Additional space for **2**(d) only:

....

....

....

....

....

....

....

End of Question 2

BLANK PAGE

**PLEASE DO NOT WRITE
ON THIS PAGE**

(C111U20-1)

Turn over.

SECTION B: OPTIONS

Answer **one** question in this section.
Choose **either** Question 3 (Theme 7) **or** Question 4 (Theme 8)

THEME 7: Social Development

3. (a) Study **Graph 3.1**.

Graph 3.1 – Infant mortality rate in Mozambique, Africa
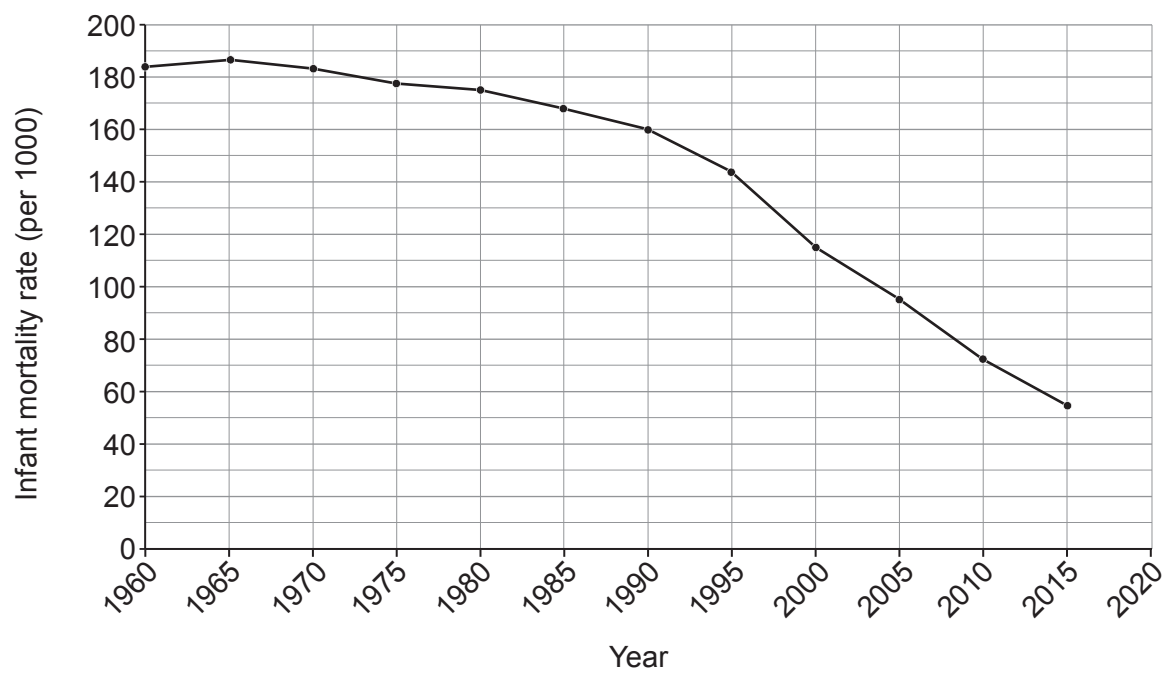
(i) Complete **Graph 3.1** using the data in the table below. [2]

Year	Infant mortality rate per 1000
2020	50

(ii) Give **two** factors which cause high rates of infant mortality in sub-Saharan Africa. [2]

Factor 1: ....

....

Factor 2: ....

....

(C111U20-1)

(iii)   Give **two** reasons why levels of social development change over time.   [4]

Reason 1: ....

....

....

....

Reason 2: ....

....

....

....

(b)   Study the information in **Resource Box 3.2**.

Resource Box 3.2 – **Information about health in Mozambique**

**Health spending in
Mozambique (2020)**

USD per person

expected

2018   2050

**Percentage of population
with access to health services**

1990

2010

2019

An increase of 8%
over 20 years

An increase of 12%
over 9 years

0   20   40   60   80   100 %
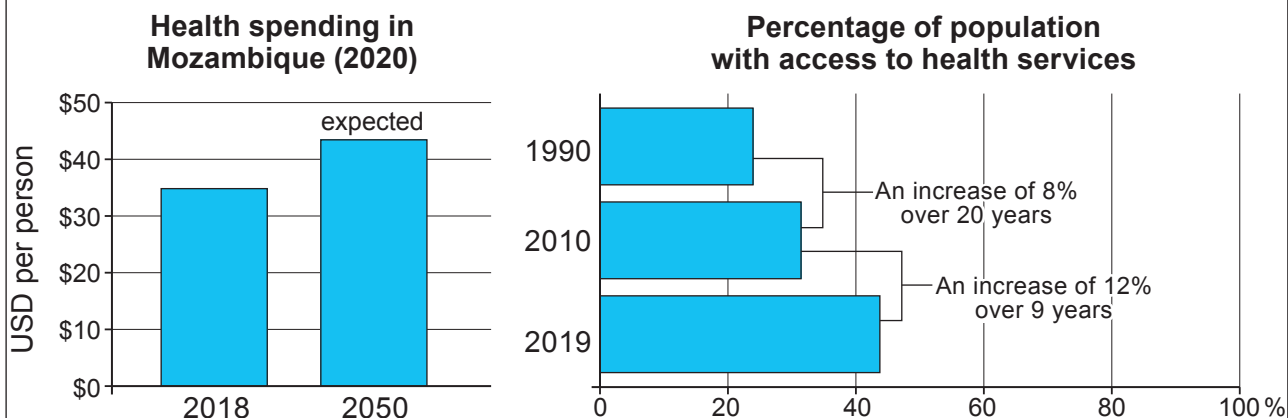
Child mortality per 1000
Child mortality is the number of deaths per 1000 of the population before the age of 5.

Deaths per 1000 live births
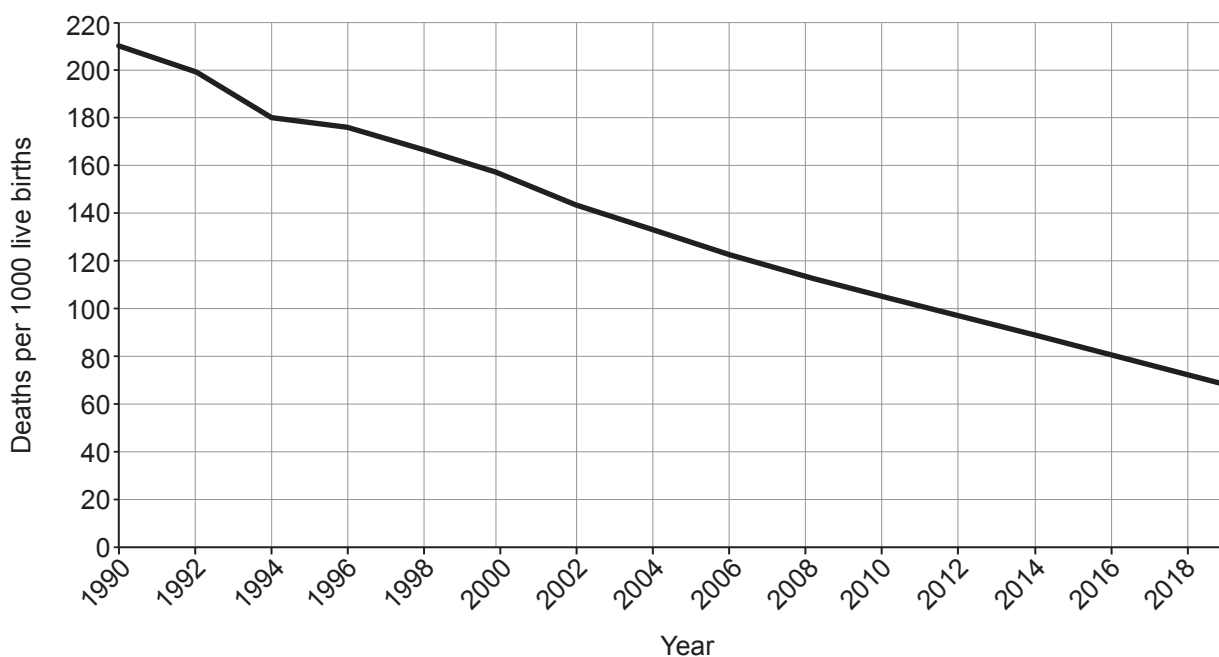
Year

- Mozambique is a low-income country (LIC). In 2020 it was ranked 188 out of 190 by GNI.
- Mozambique has one of the highest incidences of HIV and malaria in sub-Saharan Africa.
- 1.5 million people have HIV and 40 000 people die from HIV each year.
- Low levels of education and poor availability of medication contribute to high rates of HIV.

- Malaria is one of the main public health issues with an estimated 8.9 million cases; this is approximately 30% of the population.
- Mozambique also has high rates of other diseases such as typhoid, cholera and yellow fever. The climate contributes to the spread of these diseases.

(C111U20-1)

Mozambique is making good progress in tackling health care issues. How far do you agree? [8]

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

© WJEC CBAC Ltd. (C111U20-1) **Turn over.**

Additional space for question **3**(b) only:

....

....

....

....

....

End of Question 3

(C111U20-1)

BLANK PAGE

**PLEASE DO NOT WRITE
ON THIS PAGE**

(C111U20-1) **Turn over.**

THEME 8 – Environmental Challenges

If you have answered Question 3, **do not** answer this question.

4. (a) Study **Graph 4.1** below.

Graph 4.1 – Income from international tourists in Mozambique
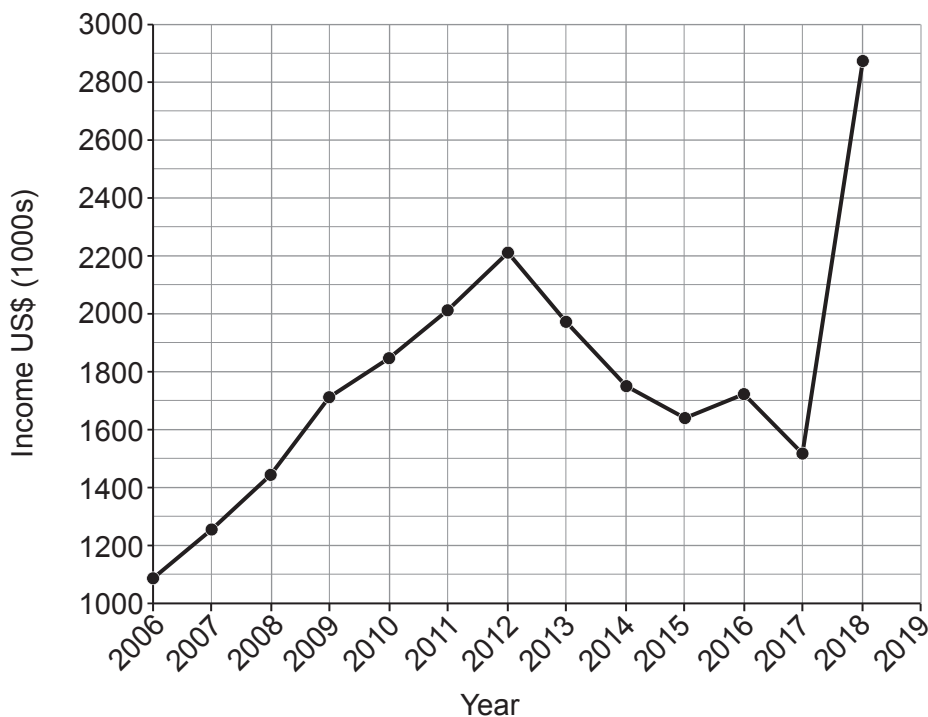
(i) Complete **Graph 4.1** using the data in the table below. [2]

Year	Income from international tourism (US$ 1000s)
2019	2100

(ii) Give **two** negative impacts of tourism on the environment. [2]

Impact 1: ....

....

Impact 2: ....

....

(C111U20-1)

(iii) Give **two** reasons why ecotourism is used in some locations. [4]

Reason 1: ....

....

....

....

Reason 2: ....

....

....

....

© WJEC CBAC Ltd.   (C111U20-1)   **Turn over.**

(b)   Study the information in **Resource Box 4.2**.

Resource Box 4.2 – **Information about Gorongosa National Park in Mozambique**

- Mozambique is a low-income country (LIC). In 2020 it was ranked 188 out of 190 by GNI.
- A National Park is an area of land protected for enjoyment by people and preservation of wildlife. Gorongosa was made a National Park in 1960. At the time Gorongosa had the greatest density of wildlife in Africa.
- A war in Mozambique between 1977 and 1992 destroyed habitats in Gorongosa. 90% of wildlife was killed.

Estimated wildlife numbers in Gorongosa National Park in 1972 and 2000

© WJEC CBAC Ltd.   (C111U20-1)
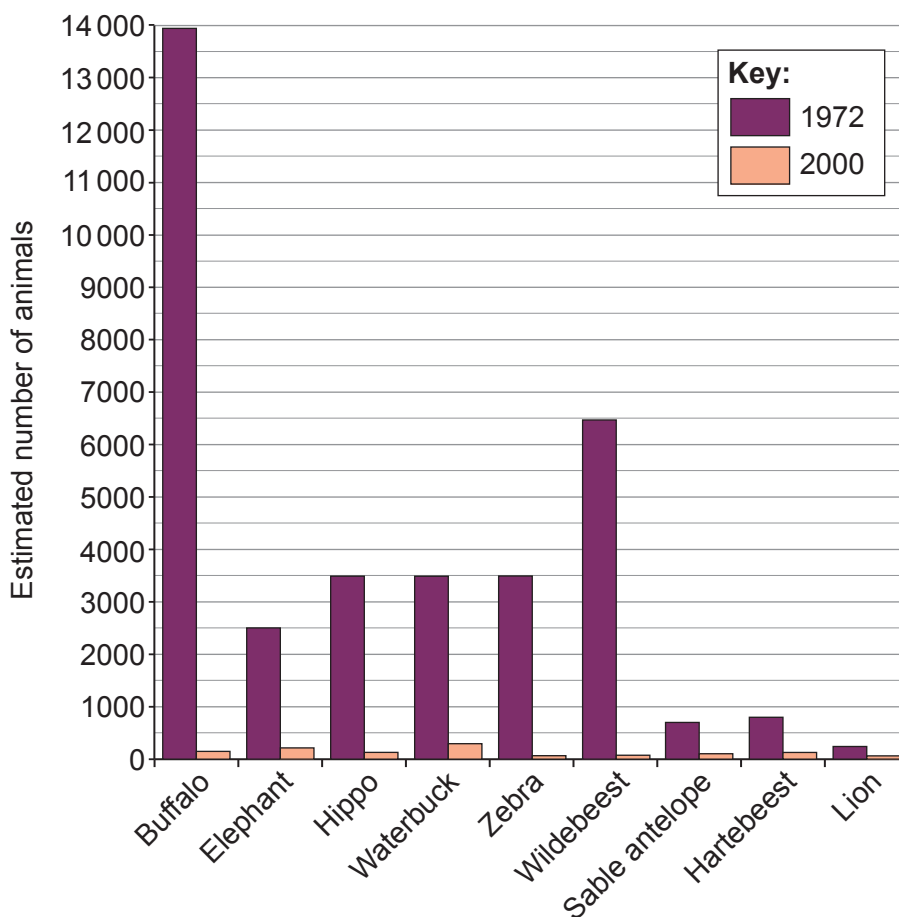
The derelict tourist camp in Gorongosa in 1995

Buffalo being released back into the wild in 2006

- Since 1994 millions of trees have been planted, many animals have been moved there and a team of rangers work to try to prevent poaching.
- In 2018, more than 100 000 large animals were counted in Gorongosa.
- Recent conflicts and COVID-19 have reduced income from tourism in Mozambique.
- Droughts have had a negative impact on habitat restoration and wildlife populations.

Mozambique is making good progress with restoring damaged environments and habitats. How far do you agree? [8]

....

....

....

....

....

....

© WJEC CBAC Ltd. (C111U20-1) **Turn over.**

Additional space for question **4**(b) only:

End of Question 4

END OF PAPER

© WJEC CBAC Ltd. (C111U20-1)

PMT

29

Question number	Additional page, if required. Write the question number(s) in the left-hand margin.	Examiner only

(C111U20-1)

Turn over.

Question number	Additional page, if required. Write the question number(s) in the left-hand margin.

(C111U20-1)

BLANK PAGE

**PLEASE DO NOT WRITE
ON THIS PAGE**

(C111U20-1)

BLANK PAGE

**PLEASE DO NOT WRITE
ON THIS PAGE**

(C111U20-1)

GCSE

wjec
cbac

C111U20-1A

S23-C111U20-1A

eduqas
Part of WJEC

FRIDAY, 9 JUNE 2023 – MORNING

GEOGRAPHY A – Component 2

RESOURCE FOLDER

This folder is for use with questions in **Component 2**.
This folder need not be handed in with your answer booklet.

Map 1.3 – An OS map to show the location of a wind farm near Biggleswade
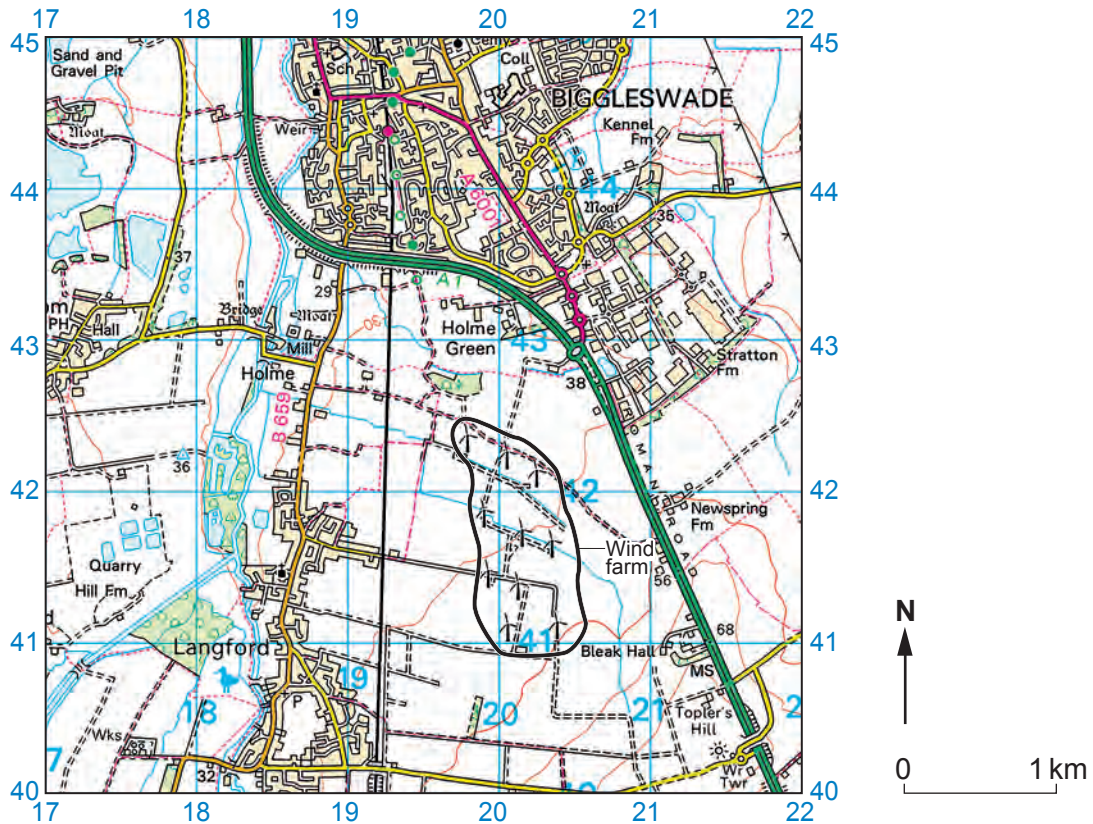
LAND FEATURES

Cutting, embankment		Graticule intersection at 5' intervals	
Electricity transmission line (pylons shown at standard spacing)		Landfill site or slag/spoil heap	
Pipe line (arrow indicates direction of flow)		Coniferous wood	
Buildings		Non-coniferous wood	
Important building (selected)		Mixed wood	
Bus or coach station		Orchard	
Glass structure		Park or ornamental ground	
Heliport		Access land (symbols indicate owner or agency - see below)	
Current or former place of worship; with tower with spire, minaret or dome		Forestry Commission	
Place of worship		Natural Resources Wales	
Triangulation pillar		National Trust; always open, limited access - observe local signs	
Mast			
Wind pump		National Trust for Scotland; always open, limited access - observe local signs	
Wind turbine			
Windmill with or without sails			

TOURIST INFORMATION

Nature reserve   Recreation / leisure / sports centre

ROADS AND PATHS

Unfenced   Dual carriageway
                                    Primary Route