



GCSE

3110U20-1

FRIDAY, 9 JUNE 2023 – MORNING

GEOGRAPHY

Unit 2: Environmental and Developmental Issues

1 hour 30 Minutes plus your additional time allowance

Surname

First name(s)

Centre Number

Candidate Number

0

ADDITIONAL MATERIALS

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

INSTRUCTIONS TO CANDIDATES

Use black ink, black ball-point pen or your usual method.

Write your name, centre number and candidate number in the spaces on the previous page.

Answer BOTH questions in Section A.

Answer ONE question from 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 back of the booklet, taking care to number the question(s) correctly.

(Turn over)

INFORMATION FOR CANDIDATES

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

Your ability to communicate and organise your ideas will be assessed in questions that are worth 6 or 8 marks. The accuracy of your writing will be assessed in your answer to question 2(a)(iii).

SECTION A – CORE THEMES

Answer ALL of the questions in this section.

THEME 5: WEATHER, CLIMATE AND ECOSYSTEMS

1 (a) Study the graph opposite.

- (i) Choose words from the word box to complete the following paragraph. [3 marks]

glacial	seasonal change	heatwave
climate change	snowstorm	inter-glacial

In the last 500 000 years, average global temperatures have varied greatly. There were times when polar and mountain ice sheets covered much of the Earth. These are known as _____

periods. In between these icy periods, warmer temperatures are more common. These are known as _____ periods.

This cyclical pattern of changing temperature is known as _____.

(Turn over)

- 1 (a) (ii) Describe the trend in mean temperature shown on the graph. Use data from the graph to support your answer. [3 marks]**

1 (b) Study the information opposite about sources used to gather evidence of climate change.

Compare the value of using ice cores as evidence of climate change with another source of evidence.

[6 marks]

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(Turn over)

Additional space for question 1(b) only:

(Turn over)

1 (c) Study the source of evidence opposite.

(i) Define the term microclimate. [1 mark]

(ii) Draw the 6 °C isoline onto the map. [2 marks]

(iii) Identify ONE weakness of using this type of map for representing data about microclimates. [1 mark]

(Turn over)

- (iv) Study the resource opposite and the resource opposite page 9. Suggest ONE factor that may influence microclimates across Greater London. Use evidence from the resources to support your answer. [3 marks]**

1 (d) Study the table opposite:

- (i) Define the term wildlife corridor. Tick (✓) the correct answer below. [1 mark]**

DEFINITION	TICK (✓)
The management of land and the resources within it, required to maintain suitable populations of species.	
An agreement between poorer and richer nations to spend money on conservation projects to ensure greater friendship and trade.	
A strip of land that links habitats, allowing wildlife to move safely from one area to another.	

(Turn over)

1 (d) (ii) Use the data in the table opposite page 11.

Calculate the percentage of wildlife corridors that are found in Asia. Show your working. [2 Marks]

Answer _____%

(Turn over)

1 (d) (iii) Explain why wildlife corridors are successful in managing habitats. Use an example you have studied in your answer. [6 marks]

[illegible]

(Turn over)

Additional space for question 1(d)(iii) only:

(Turn over)

END OF QUESTION 1

(Turn over)

THEME 6: DEVELOPMENT AND RESOURCE ISSUES

2. (a) Study the graph opposite.

(i) Give the global population in the year 2000. [1 mark]

_____ billion people.

(ii) Describe the relationship between water consumption and population. Use data in your answer. [3 marks]

(Turn over)

2 (a) (iii) The three factors listed below have all played a part in increasing the demand for water.

**Population
Growth**

**Growth of
Consumerism**

**Agricultural
Change**

Choose the factor which, in your opinion, has had the greatest impact. Justify your choice. [8 marks]

The accuracy of your writing will be assessed in your answer to this question. [3 marks]

(Turn over)

Additional space for question 2(a)(iii) only:

2 (b) Study the diagram opposite.

- (i) Circle the correct answers in the passage below. [2 marks]**

The value of Brazil's exports is (MORE THAN / LESS THAN / THE SAME) as its imports, and the country that it does most trade with is (USA / GERMANY / CHINA).

- (ii) What is a trade bloc? [2 marks]**

(Turn over)

2 (b) (iii) Read the definitions below.

LETTER	DEFINITION
A	Limits on the amount of goods imported
B	An agreement between two countries to trade together
C	Financial benefits given by the government to support businesses, for example farmers
D	The import and export of goods and services across international boundaries
E	Taxes imposed on imports

Add the letter of the correct definition to each of the terms below. One of the definitions will not be used.

[4 marks]

TERM	DEFINITION
Global trade	
Tariffs	
Quotas	
Subsidies	

(Turn over)

2 (b) (iv) Explain why global trade has contributed to uneven patterns of development. [4 marks]

[illegible]

(Turn over)

- 2 (c) The term north–south divide refers to the inequality in social and economic development between southern England and the rest of the UK.**

Give ONE economic and one social reason why there are differences in economic development between areas within the UK. [4 marks]

Economic reason _____

Social reason _____

(Turn over)

END OF QUESTION 2

(Turn over)

SECTION B – OPTIONS

Answer ONE question in this section, EITHER Question 3 OR Question 4.

THEME 7: SOCIAL DEVELOPMENT ISSUES

3. (a) Study the graphs opposite.

- (i) Calculate the total percentage of males and females aged 5–9 years in 1950.
Show your working. [2 marks]**

Answer: _____%

(Turn over)

3 (a) (ii) Describe how the population structure of Bangladesh changed between 1950 and 2019. Use figures from the population pyramids to support your answer. [4 marks]

[illegible]

(Turn over)

3 (a) (iii) Describe how ONE economic factor affects death rates. [2 marks]

(iv) Explain why changing social factors affect population structure in South Asia. [4 marks]

(Turn over)

3 (b) (i) State TWO factors that lead to people becoming refugees. [2 marks]

1.

2.

(Turn over)

- (ii) Give ONE reason why asylum seekers may want to leave some South Asian countries. [2 marks]

3 (c) Study the resources opposite.

International agreements have been successful in reducing the movement of refugees.

How far do you agree with this statement?

You may refer to other examples you have studied.

[8 marks]

[illegible]

(Turn over)

(Turn over)

Additional space for question 3(c) only:

[illegible]

END OF QUESTION 3

(Turn over)

If you have answered Question 3 DO NOT answer Question 4

THEME 8: ENVIRONMENTAL CHALLENGES

4. (a) Study the graph opposite.

- (i) Calculate the projected change in waste production in North America between 2016 and 2050. Show your working. [2 marks]**

Answer: _____ million tonnes

(Turn over)

4 (a) (ii) Describe how the pattern of predicted global waste changes from 2016 to 2050. [4 marks]

[illegible]

(Turn over)

4 (a) (iii) Describe ONE way that waste can be disposed of. [2 marks]

(iv) Explain why consumerism has led to a change in the amount of waste produced. [4 marks]

(Turn over)

- 4 (b) (i) In recent years there has been a rapid rise in the amount of e-waste created across the planet. Discarded computers account for much of this waste.

Name TWO other sources of e-waste. [2 marks]

1. _____

2. _____

- (ii) Give ONE reason why the growth of e-waste affects people. [2 marks]

(Turn over)

4 (c) Study the resource box opposite.

Management schemes aimed at preserving habitats are always successful. How far do you agree with this statement? You may refer to other examples you have studied. [8 marks]

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Additional space for question 4(c) only:

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END OF QUESTION 4

END OF PAPER

QUESTION NUMBER	ADDITIONAL PAGE, IF REQUIRED. WRITE THE QUESTION NUMBER(S) IN THE LEFT-HAND MARGIN.

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Table for use with Question 1 (d):

TWENTY OF THE MOST IMPORTANT WILDLIFE CORRIDORS

NAME OF WILDLIFE CORRIDOR	COUNTRY	CONTINENT	MAN-MADE OR NATURAL
Banff National Park	Canada	North America	Man-made
Natuurbrug Zanderij Crailoo	Netherlands	Europe	Man-made
US Highway 93 North	USA	North America	Man-made
Christmas Island National Park	Australia	Oceania	Man-made
Mt. Kenya National Forest	Kenya	Africa	Man-made
Eco-Link @BKE	Singapore	Asia	Man-made
Lower Rio Grande Valley National Wildlife Refuge	Mexico	North America	Man-made
Norway's Bee Highway	Norway	Europe	Man-made
Burnham Wildlife Corridor	USA	North America	Man-made
Yellowstone to Yukon Wildlife Corridor	USA	North America	Man-made
Sredneussuriisky Wildlife Corridor	Russia and China	Asia	Man-made
Kallhäll Nature Bridge	Sweden	Europe	Man-made
Madaraka Express railway	Kenya	Africa	Man-made
Mandai Wildlife Bridge	Singapore	Asia	Man-made
Railway Turtle Tunnels	Japan	Asia	Man-made
Kaziranga-Karbi Anglong Corridor	India	Asia	Natural
Terai Arc Landscapes	India and Nepal	Asia	Natural
Kanha Pench Corridor, Satpuda-Maikal Landscape	India	Asia	Natural
Sawantwadi-Dodamarg Wildlife Corridor	India	Asia	Natural
European Green Belt	Numerous – from Finland to Bulgaria	Europe	Natural