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OCR
Oxford Cambridge and RSA

Friday 9 June 2023 – Morning

GCSE (9–1) Geography A (Geographical Themes)

J383/02 The World Around Us

Time allowed: 1 hour

You must have:
- the Resource Booklet (inside this document)

You can use:
- a ruler (cm/mm)
- a scientific or graphical calculator

Please write clearly in black ink. **Do not write in the barcodes.**

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

First name(s) _____

Last name _____

INSTRUCTIONS
- Use black ink. You can use an HB pencil, but only for graphs and diagrams.
- Write your answer to each question in the space provided. If you need extra space use the lined pages at the end of this booklet. The question numbers must be clearly shown.
- Answer **all** the questions.

INFORMATION
- The total mark for this paper is **60**.
- The marks for each question are shown in brackets **[ ]**.
- Quality of extended response will be assessed in questions marked with an asterisk (*).
- Spelling, punctuation and grammar (SPaG) and the use of specialist terminology will be assessed in questions marked with a pencil (✎).
- This document has **12** pages.

ADVICE
- Read each question carefully before you start your answer.

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Ecosystems of the Planet

1 **(a)** Look at the table below, which shows climate data for a hot desert ecosystem.

Climate data for a hot desert ecosystem

Months	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall (mm)	6	5	4	2	1	0	0	0	0	1	3	6
Average Temperature (°C)	14	15	17	22	25	27	28	28	27	24	19	15

(i) State the **mode** for the rainfall data.

..... **[1]**

(ii) Calculate the **mean** annual rainfall.
Give your answer to **one** decimal place.

..... **[1]**

(iii) Identify **two** features of the climate data which are typical of a hot desert ecosystem.

Feature 1 .....

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Feature 2 .....

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[2]

(b) Explain how plants are **adapted** to the climate of a hot desert ecosystem.

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..... **[4]**

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(c) Explain briefly **two** threats to the biodiversity of tropical rainforests.

Threat 1 .....

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Threat 2 .....

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[4]

(d) CASE STUDY

Tropical rainforest interdependence

Tropical rainforest you have studied: .....

Explain the **interdependence** of climate, soil and plants in tropical rainforest ecosystems.

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..... **[6]**

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People of the Planet

2 **(a)** Look at **Fig. 1** in the Resource Booklet, which shows a population pyramid for a Low Income Developing Country (LIDC).

(i) What is the approximate total of the population aged **under** 15 years?

A 6 million

B 10 million

C 14 million

D 18 million

Write the correct letter in the box. ☐ **[1]**

(ii) Which of the statements about the population pyramid is **correct**?

A There is a high birth rate and high life expectancy

B There is a high birth rate and low life expectancy

C There is a low birth rate and high life expectancy

D There is a low birth rate and low life expectancy

Write the correct letter in the box. ☐ **[1]**

(b) **(i)** Define economic development.

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..... **[1]**

(ii) Explain the **advantages** of using the Human Development Index (HDI) as a development indicator.

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..... **[3]**

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(c)* **CASE STUDY**

LIDC or EDC development

LIDC or EDC you have studied: ....

To what extent do changes in employment structure over time **influence** economic development?

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Spelling, punctuation and grammar and the use of specialist terminology **[3]**

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Environmental threats to our Planet

3 **(a)** Look at **Fig. 2a** and **Fig. 2b** in the Resource Booklet.

Fig. 2a shows average global temperatures for the last 400 000 years.

Fig. 2b shows carbon dioxide levels in the atmosphere for the last 400 000 years.

(i) State the **lowest** temperature shown on **Fig. 2a**.

Give your answer as a whole number.

..... **[1]**

(ii) Which of the statements is a correct definition of an **ice age**?

A Cooling average global temperatures causing increased snowfall

B Lower than average global temperatures when glacial ice covers more land

C Variable average global temperatures causing glacial ice to form and melt

D Warming average temperatures causing glacial ice to melt

Write the correct letter in the box. ☐ **[1]**

(iii) Look at **Fig. 2a** and **Fig. 2b**.

Describe the **relationship** between average global temperatures and carbon dioxide levels.

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..... **[2]**

(iv) Greenhouse gases are one cause of increases in global temperatures.

Explain **one** possible **natural** cause of increases in global temperatures.

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..... **[2]**

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(b) Look at **Fig. 3** in the Resource Booklet, which shows extreme weather and climate events costing one billion dollars in the USA from 2010 to 2017.

(i) Which type of event, shown in **Fig. 3**, occurred **most** often in 2017?

..... **[1]**

(ii) Suggest how the increased frequency of extreme weather and climate events, shown in **Fig. 3**, may be a consequence of global climate change.

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(c) Explain how the global circulation of the atmosphere leads to extreme wet weather conditions in **one** part of the world.

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..... **[3]**

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(d)* CASE STUDY

Effects of a drought event

Drought event you have studied: .....

For a drought event you have studied, examine how far the environmental effects had an impact on **people**.

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..... **[8]**

END OF QUESTION PAPER

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ADDITIONAL ANSWER SPACE

If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).

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