

2

Ecosystems of the Planet

1

(a) Look at **Fig. 1** in the Resource Booklet.

(i) Describe how the grasshopper is connected to other animals in the ecosystem.

.....

.....

.....

..... [2]

(ii) Identify **one** abiotic component shown in the ecosystem.

..... [1]

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

(i) Which month has the **highest** rainfall?

..... [1]

(ii) Calculate the temperature **range**.

..... [1]

(c) State **two** features of the climate for a **polar ecosystem**.

1

.....

2

..... [2]

2

(a) Look at **Table 1**.

Table 1. Development indicators for four African countries

Country	GNI per capita (\$)	Life Expectancy (years)	Literacy Rate (%)
Angola	6 600	62	75
Equatorial Guinea	17 000	67	95
Mozambique	1 200	57	61
Zambia	3 300	65	86

(i) Calculate the **mean** GNI per capita.

..... [1]

(ii) Which type of graph would **best** show the relationship between GNI per capita and Life Expectancy?

- A bar graph
- B line graph
- C population pyramid
- D scatter graph

Write the correct letter in the box. [1]

(iii) GNI per capita is an economic development indicator.

State **one** other development indicator **not** shown in **Table 1** above.

..... [1]

(iv) Explain why Equatorial Guinea is classified as an Emerging and Developing Country (EDC) instead of a Low-Income Developing Country (LIDC).

Use data from **Table 1** in your answer.

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

Environmental threats to our Planet

3

(a)

(i) Which statement is a **correct** definition of a drought?

- A a period of time with higher than normal rainfall
- B a period of time with higher than normal temperatures
- C a period of time with lower than normal rainfall
- D a period of time with lower than normal temperatures

Write the correct letter in the box. [1]

(ii) Look at **Fig. 3** in the Resource Booklet.

Describe how **Fig. 3** shows evidence of a drought.

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

(iii) Explain the **causes** of drought.

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

(b) Look at **Fig. 4** in the Resource Booklet.

(i) Describe briefly the change in the area of permanent sea ice from 1980 to 2020.

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

(ii) Suggest how the enhanced greenhouse effect could have caused the change in the area of permanent sea ice.

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

(c) Which statement is **correct** about how ice cores show evidence of climate change?

- A colour of the ice
- B concentration of gases in air bubbles
- C evidence of ice melting
- D thickness of the ice

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

(d) Explain how volcanic activity is a **natural** cause of climate change.

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

[illegible]

OCR
Oxford Cambridge and RSA

Copyright Information

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact The OCR Copyright Team, The Triangle Building, Shaftesbury Road, Cambridge CB2 8EA.

OCR is part of Cambridge University Press & Assessment, which is itself a department of the University of Cambridge.