GCSE GEOGRAPHY
Paper 1 Living with the physical environment

Specimen Time allowed: 1 hour 30 minutes

Materials
For this paper you must have:
- a pencil
- a ruler.

Instructions
- Use black ink or black ball-point pen.
- Fill in the boxes at the bottom of this page.
- Answer all questions in Section A and Section B.
- Answer two questions in Section C.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information
- The marks for questions are shown in brackets.
- The total number of marks available for this paper is 88.
- Spelling, punctuation, grammar and specialist terminology will be assessed in Question 01.9.

Advice
For the multiple-choice questions, completely fill in the circle alongside the appropriate answer(s).

CORRECT METHOD  WRONG METHODS

If you want to change your answer you must cross out your original answer as shown.
If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown.

Please write clearly, in block capitals, to allow character computer recognition.

Centre number Candidate number
Surname Forename(s)

Candidate signature

This draft qualification has not yet been accredited by Ofqual. It is published to enable teachers to have early sight of our proposed approach to GCSE Geography. Further changes may be required and no assurance can be given that this proposed qualification will be made available in its current form, or that it will be accredited in time for first teaching in September 2016 and first award in August 2018.
Section A  The challenge of natural hazards

Answer all questions in this section.

Question 1  The challenge of natural hazards

Study Figure 1, a graph showing changes in the amount of carbon dioxide (CO₂) in the atmosphere.

Figure 1

![Graph showing changes in carbon dioxide concentration over time.](image)
Describe the change in the amount of carbon dioxide in the atmosphere shown in Figure 1. [2 marks]

Outline one reason why the concentration of carbon dioxide in the atmosphere has changed over time. [2 marks]

Question 1 continues on the next page
Study Figure 2, a map showing how global surface temperatures might change by 2070.

**Figure 2**

Using Figure 2, which two of the following statements are true?

Shade two circles only.

A. Changes in temperature are likely to be lowest in equatorial areas.

B. Temperatures in Asia are likely to rise by 1 °C.

C. Temperatures over most of the sea areas north of 60° N are expected to increase by 4 °C.

D. Temperatures over the whole of Africa are likely to rise by 3 °C or 4 °C.

E. The central parts of the continents are expected to have the lowest rise in temperature.

F. The rise in sea temperatures is likely to be greatest south of the equator.

[2 marks]
‘The weather of the UK is becoming more extreme.’

Use evidence to support this statement. [6 marks]

Question 1 continues on the next page
Study Figure 3, a world map showing the tracks and strengths of tropical storms.

**Figure 3**

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0 1 5 Complete the following sentences. [2 marks]

The greatest number of category four tropical storms happen in the

…………………………………………… Ocean.

Apart from very strong winds, one other associated weather feature of a category four storm is ………………………………………………………………………….

0 1 6 Give one condition that is needed for a tropical storm to form. [1 mark]
Study **Figure 4**, a satellite image of Hurricane Katrina shortly before it crossed New Orleans in the USA.

**Figure 4**

Using **Figure 4** only, forecast the weather conditions in New Orleans over the next 24 hours.

[4 marks]

Question 1 continues on the next page
Give two reasons why tropical storms eventually lose their energy. [2 marks]

Reason 1: 

Reason 2: 

Question 1 continues on page 10
Study **Figure 5a**, a photograph showing an area affected by an earthquake in 2010, and **Figure 5b**, a photograph showing an area affected by a volcanic eruption in 2006.
Choose either an earthquake or a volcanic eruption.

Assess the extent to which primary effects are more significant than secondary effects.

Use Figure 5a or 5b and an example you have studied.

Chosen tectonic hazard:
Section B  The living world

Answer all questions in this section.

Question 2  The living world

Study Figure 6, a world map showing some large scale global ecosystems.

Figure 6

Using Figure 6, which one of the following statements is correct?

Shade one circle only.

A  Most areas of tundra are found on the edges of land masses.  [ ]

B  The largest polar area is found north of the equator.  [ ]

C  There are no areas of tundra south of the equator.  [ ]

D  There are no polar areas south of the Tropic of Capricorn.  [ ]

[1 mark]
Describe the distribution of hot deserts shown in Figure 6. [2 marks]

Which one of the following statements describes the climate of a tropical rainforest?
Shade one circle only.

A. Mild temperatures (10–18 °C), rainfall all year (approximately 1000 mm)
B. High temperatures all year (over 30 °C), very dry (250 mm of rainfall per year)
C. High temperatures all year (25–27 °C), rainfall in every month (1800–2000 mm per year)
D. Wide range of temperatures (15–30 °C), seasonal rainfall (approximately 750 mm) [1 mark]

Question 2 continues on the next page
Study Figure 7, a photograph showing part of the tropical rainforest in Central Africa.

Figure 7
Describe and explain the features of the vegetation shown in Figure 7. [6 marks]

Question 2 continues on the next page
Study Figure 8, which shows how the forested regions of the world changed between 2005 and 2009.

**Figure 8**

Which region of the world had the greatest rate of deforestation between 2005 and 2009?

[1 mark]
State the number of regions of the world where the rate of deforestation was greater than the world average rate of deforestation between 2005 and 2009. [1 mark]

Outline one possible environmental impact of deforestation. [2 marks]

Suggest one way that international co-operation can help make tropical rainforests more sustainable. [2 marks]

Question 2 continues on the next page
For a hot desert environment or cold environment you have studied, to what extent does that environment provide both opportunities and challenges for development? [9 marks]

Chosen environment:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

End of Section B
Section C  Physical landscapes in the UK

Answer two questions from the following:
Question 3 (Coasts), Question 4 (Rivers), Question 5 (Glacial).

Shade the circle below to indicate which two optional questions you will answer.

CORRECT METHOD  🟢  WRONG METHODS 🟣 🟡 🟢

Question 3  Coastal landscapes in the UK

Study Figure 9, on the insert, a 1: 50 000 Ordnance Survey map extract of part of the coast of south west England.

0 3  .  1 Using Figure 9, match the coastal feature below to the correct grid reference.

Shade one circle only.

Choose from the following grid references:

<table>
<thead>
<tr>
<th>Coastal feature</th>
<th>Grid reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wave cut platform</td>
<td>A 673398</td>
</tr>
<tr>
<td></td>
<td>B 669421</td>
</tr>
<tr>
<td></td>
<td>C 668428</td>
</tr>
</tbody>
</table>

[1 mark]

0 3  .  2 What is the straight line distance between Warren Point (6642) and Bolt Tail (6639)?

Shade one circle only.

<table>
<thead>
<tr>
<th>Distance</th>
<th>Circle</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 1.8 km</td>
<td>🟢</td>
</tr>
<tr>
<td>B 2.4 km</td>
<td>🟢</td>
</tr>
<tr>
<td>C 3.0 km</td>
<td>🟢</td>
</tr>
<tr>
<td>D 3.6 km</td>
<td>🟢</td>
</tr>
</tbody>
</table>

[1 mark]

0 3  .  3 Suggest one reason for the uneven shape of the coastline shown in Figure 9.

[1 mark]
Study Figure 10, a photograph of Bolt Tail shown in grid square 6639 Figure 9.

**Figure 10**

Using Figures 9 and 10, in which direction was the photographer facing when the picture was taken?

Shade one circle only.

- A North east
- B North west
- C South east
- D South west

[1 mark]

Name one process of erosion that may affect these cliffs.

[1 mark]

Question 3 continues on the next page
Study **Figure 11**, a photograph showing sea defences at Beesands in Devon.

**Figure 11**

Suggest how the sea defences shown in **Figure 11** help to protect the coastline.

[4 marks]
Study **Figure 12**, a sketch map showing features of coastal deposition.

**Figure 12**

Using **Figure 12** and your own knowledge, explain how different landforms may be created by the transport and deposition of sediment along the coast.  

[6 marks]

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[Blank lines for response]
Question 4  River landscapes in the UK

Study Figure 13, a 1: 50 000 Ordnance Survey map extract of part of the River Ouse.

Figure 13

State one characteristic of the course of the River Ouse in grid square 4754.

[1 mark]

Give the difference in height between the river flood plain at 481561 and the spot height at 460563.

[1 mark]
Study Figure 14, a diagram showing the long and two cross profiles of a river.

**Figure 14**

04 3 Describe the shape of the river’s long profile.

[1 mark]

04 4 Suggest one reason why the cross profile of the river valley changes between A and B.

[1 mark]

04 5 State one reason why the size of sediment carried by the river decreases downstream.

[1 mark]

Question 4 continues on the next page
Study **Figure 15**, a photograph showing the effects of river flooding in Somerset in 2014.

**Figure 15**

Explain the likely economic effects of river flooding on the area shown in **Figure 15**. 

[4 marks]
Study **Figure 16**, a photograph showing the waterfall at High Force on the River Tees.

**Figure 16**

[Image of a waterfall]

04. Using **Figure 16**, explain the processes involved in the formation of the landforms shown. [6 marks]

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[Blank lines for written response]
Question 5  Glacial landscapes in the UK

Study Figure 17, a 1: 50 000 Ordnance Survey map extract of part of North Wales.

**Figure 17**

Identify the glacial landform at grid reference 653532. Shade **one** circle only.

A  glacial trough
B  pyramidal peak
C  truncated spur

[1 mark]

Identify the grid square in which the gradient of the land is steepest. Shade **one** circle only.

A  5952
B  5954
C  6252

[1 mark]
Study Figure 18, a photograph of Crib Goch shown in grid square 6255 on Figure 17.

**Figure 18**

Using Figures 17 and 18, name the lake shown in the photograph.  

[1 mark]

Suggest why the rock shown in the foreground of Figure 18 is fractured.  

[2 marks]

Question 5 continues on the next page
Study Figure 19, photographs showing tourist activity in Snowdonia.
Suggest how tourism might put pressure on the physical environments shown in Figure 19.

[4 marks]

Question 5 continues on the next page
Study Figure 20, a diagram showing glacial moraines.

Using Figure 20, explain how different landforms of deposition may be created in a glacial environment.

[6 marks]

END OF QUESTIONS
There are no questions printed on this page