

Please write clearly in block capitals.

Centre number

--	--	--	--	--

Candidate number

--	--	--	--

Surname

Forename(s)

Candidate signature

I declare this is my own work.

A-level GEOGRAPHY

Paper 1 Physical Geography

Time allowed: 2 hours 30 minutes

Materials

For this paper you must have:

- the colour insert (enclosed)
- a pencil
- a rubber
- a ruler.

You may use a calculator.

Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **all** questions in Section A.
- Answer **either** Question 2 **or** Question 3 **or** Question 4 in Section B.
- Answer **either** Question 5 **or** Question 6 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.
- If you need additional extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- 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 120.

For Examiner's Use	
Section	Mark
A	
B	
C	
TOTAL	



Section A**Water and carbon cycles**

Answer **all** questions in this section.

0 1 . 1

Outline the relationship between the water cycle and the carbon cycle in the atmosphere.

[4 marks]

Extra space _____



Figure 1 shows the impact of different rates of deforestation and afforestation upon land surface temperature (LST) at different latitudes. The data was collected between 2000 and 2011.

[6 marks]

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Turn over ►



Figure 2 shows a simplified version of Europe's forest carbon cycle.

Using **Figure 2** and your own knowledge, assess the implications of the data for attempts to manage carbon transfers.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

Extra space _____



With reference to a river catchment that you have studied, assess the potential factors which can impact upon the flood hydrograph.

[illegible]

[illegible]

36

End of Section A**Turn over for Section B****Turn over ►**

Section B

Answer **one** question in this section.

Answer **either** Question 2 **or** Question 3 **or** Question 4.

Question 2 Hot desert systems and landscapes

0 2 . 1 Outline the role of wind in the process of transport in hot deserts.

[4 marks]

Extra space



Figure 3a shows average total rainfall (1979–2009) between November and April measured at multiple recording stations across Saudi Arabia.

0	2	.	2
---	---	---	---

[6 marks]

[illegible]

Turn over ►



Figure 4 shows a landscape in the Namib Desert in southern Africa.

Figure 4



Note: The landforms in this landscape are aligned approximately north-west to south-east and extend from between 16 km to 32 km in length, reaching heights between 60 metres to 240 metres. The sediment source is the Orange River, several kilometres away.

0 2 . 3

Using **Figure 4** and your own knowledge, assess the relative importance of factors leading to the development of this landscape.

[6 marks]



Extra space

Question 2 continues on the next page

Turn over ►



[20 marks]

[illegible]

Do not write
outside the
box

Extra space _____

Turn over ►



36

End of Question 2

0	3	.	1
---	---	---	---

[4 marks]

Extra space _____

Question 3 continues on the next page

Figure 5 shows the distribution of coastal erosion and accretion (sediment build up) across selected European coastlines in 2004.

[6 marks]

[illegible]



Figure 6 is a photograph of a landform located in the Humber Estuary, UK.

Figure 6



Note: This landform extends about 5 km across the Humber Estuary and is only 50 metres wide at its narrowest point. The Holderness coastline to the north comprises mainly boulder clay, which is unconsolidated material deposited at the end of the last ice age.

0 3 . 3

Using **Figure 6** and your own knowledge, assess the relative importance of factors leading to the development of this landform.

[6 marks]

Turn over ►



Extra space



To what extent can an understanding of feedback systems help with the management of **one or more** coastal landscapes that you have studied?

[illegible]

[illegible]

Do not write
outside the
box

36

End of Question 3

Turn over ►



Question 4 Glacial systems and landscapes

0	4	.	1
---	---	---	---

 Outline processes by which glaciers erode the landscape.**[4 marks]**

Extra space



Figure 7 shows the surface velocity of various glaciers, including Thwaites Glacier, Antarctica.

Analyse the data shown in **Figure 7**.

[6 marks]

[illegible]

Extra space _____

Question 4 continues on the next page

Turn over ►



Extra space _____

Question 4 continues on the next page

Turn over ►



[20 marks]

[illegible]

[illegible]

Do not write
outside the
box

36

End of Question 4
End of Section B



Answer **one** question in this section.

Answer **either** Question 5 **or** Question 6.

0 5 . 1 Outline the concept of the Hazard Management Cycle.

[4 marks]

Extra space

Question 5 continues on the next page

Turn over ►



Figures 9a–9d show information about volcanic eruptions.

Assess the usefulness of **Figures 9a–9d** in presenting information on volcanic eruptions.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Extra space _____



Figure 10 shows information about the 2010 earthquake in Haiti.

Using **Figure 10** and your own knowledge, assess the challenges in managing an event such as this.

[9 marks]

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Extra space _____

Turn over ►



How far do you agree that global governance is crucial in meeting the challenge of reducing incidence of wildfires?

[illegible]

Extra space _____

0 5 . 5

To what extent does plate tectonic theory help in understanding the development of landforms associated with plate movement?

[20 marks]

Turn over ►



[illegible]

Do not write
outside the
box

Extra space _____

End of Question 5

Turn over ►



Question 6 Ecosystems under stress**0 6 . 1**

Outline the effect of human activity on succession in **one** plagioclimax that you have studied (eg heather moorland).

[4 marks]

Extra space _____



Figure 11 shows selected climate extremes and impacts affecting coral and forests in tropical and sub-tropical regions.

Analyse the data shown in **Figure 11**.

[6 marks]

[illegible]

Extra space _____

Question 6 continues on the next page

Turn over ►



Figure 12 shows information about coral reefs.

Using **Figure 12** and your own knowledge, assess the implications of this information for the management of coral reefs.

[9 marks]

[illegible]

Extra space _____



How far do you agree that global governance has a role to play in the conservation of the savanna grassland biome?

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Extra space _____

0 6 . 5

With reference to the tropical rainforest biome, assess the view that latitude is the most important factor in its natural development.

[20 marks]



[illegible]

Do not write
outside the
box

Extra space _____

END OF QUESTIONS



There are no questions printed on this page

*Do not write
outside the
box*

**DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED**



[illegible]

[illegible]

[illegible]

[illegible]

There are no questions printed on this page

**DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED**

Copyright information

For confidentiality purposes, all acknowledgements of third-party copyright material are published in a separate booklet. This booklet is published after each live examination series and is available for free download from www.aqa.org.uk.

Permission to reproduce all copyright material has been applied for. In some cases, efforts to contact copyright-holders may have been unsuccessful and AQA will be happy to rectify any omissions of acknowledgements. If you have any queries please contact the Copyright Team.

Copyright © 2021 AQA and its licensors. All rights reserved.

