

Paper Reference 1GA0/01
Pearson Edexcel
Level 1/Level 2 GCSE (9–1)

Total Marks

Geography A

Paper 1: The Physical Environment

Monday 18 May 2020 – Morning

Time: 1 hour 30 minutes plus your additional time allowance.

In the boxes below, write your name, centre number and candidate number.

Surname					
Other names					
Centre Number					
Candidate Number					

X62017RA

YOU MUST HAVE

Calculator

YOU WILL BE GIVEN

Diagram Book

Resource Book

INSTRUCTIONS

In Section A answer Question 1 and TWO questions from Questions 2, 3 and 4.

In Section B and Section C answer ALL questions.

Answer the questions in the spaces provided in this Question Paper or in the Diagram Book – there may be more space than you need.

Where asked you must show all your working out with your answer clearly identified at the end of your solution.

INFORMATION

The total mark for this paper is 94

**The marks for EACH question are shown in brackets
– use this as a guide as to how much time to spend on
each question.**

**The marks available for spelling, punctuation,
grammar and use of specialist terminology are clearly
indicated.**

There may be spare copies of some diagrams.

ADVICE

**Read each question carefully before you start to
answer it.**

Check your answers if you have time at the end.

SECTION A

The Changing Landscapes of the UK

Answer ALL parts of Question 1. Write your answers in the spaces provided.

Some questions are multiple choice. Write the letter(s) of your chosen answer(s) in the box(es) provided.

1. UK landscapes consist of a range of different rock types.

(a) (i) State ONE example of a sedimentary rock.
(1 mark)

(ii) Identify ONE characteristic of a sedimentary rock.

A formed by cooling

B crystal structure

C layered structure

D formed by heating

Answer

(1 mark)

(continued on the next page)

Turn over

1. continued.

(b) Study Figure 1 in the Resource Book.

**Describe the relief of the landscape in
grid square A.**

(2 marks)

(continued on the next page)

1. continued.

(c) Explain ONE way in which forestry can affect the landscape.

(2 marks)

(Total for Question 1 = 6 marks)

Answer only TWO questions from Question 2 (Coastal Landscapes and Processes), Question 3 (River Landscapes and Processes) and Question 4 (Glaciated Upland Landscapes and Processes).

Question 2: Coastal Landscapes and Processes

If you answer Question 2 put a cross in this box

☐

2. Coastal landscapes are constantly being changed by different processes.

(a) Study Figure 2a in the Resource Book.

Identify landform **X** shown on Figure 2a.

A arch

B spit

C stack

D wave cut platform

Answer

(1 mark)

- (b) State ONE type of weathering process.
(1 mark)

(continued on the next page)

Turn over

2. continued.

(c) Groynes are an example of hard engineering.

Explain ONE disadvantage of using groynes to protect the coast.

(2 marks)

(continued on the next page)

2. continued.

(d) Study Figures 2b and 2c in the Resource Book.

Examine the role of geology and physical processes in the formation of the coastal landforms shown in Figures 2b and 2c.

(8 marks)

Answer lines continue on the next two pages.

[illegible]

2. (d) continued.

[illegible]

Turn over

2. (d) continued.

[illegible]

(Total for Question 2 = 12 marks)

Question 3: River Landscapes and Processes

If you answer Question 3 put a cross in this box

☐

3. River landscapes are constantly being changed by different processes.

(a) Study Figure 3a in the Resource Book.

Identify landform **Y** shown on Figure 3a.

A interlocking spurs

B levee

C point bar

D river cliff

Answer

(1 mark)

(b) State ONE type of erosion process.

(1 mark)

(continued on the next page)

Turn over

3. continued.

(c) Explain ONE way that heavy rainfall can cause flooding in river landscapes.

(2 marks)

(continued on the next page)

3. continued.

(d) Study Figure 3b in the Resource Book.

Examine the advantages and disadvantages of the flood defences (washlands and floodplain zoning) shown in Figure 3b.

(8 marks)

Answer lines continue on the next two pages.

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Turn over

3. (d) continued.

[illegible]

Turn over

3. (d) continued.

(Total for Question 3 = 12 marks)

Question 4: Glaciated Upland Landscapes and Processes

**If you answer Question 4 put a cross in this
box**

☐

4. Glaciated upland landscapes are constantly being changed by different processes.

(a) Study Figure 4a in the Resource Book.

Identify the landform labelled **Z** on Figure 4a.

- A arête
- B hanging valley
- C terminal moraine
- D truncated spur

Answer

(1 mark)

(b) State ONE type of mass movement process.

(1 mark)

(continued on the next page)

Turn over

4. continued.

(c) Explain ONE way in which glaciers transport material.

(2 marks)

(continued on the next page)

4. continued.

(d) Study Figure 4b in the Resource Book.

Examine the advantages and disadvantages of human activities in the glaciated upland landscape shown in Figure 4b.

(8 marks)

Answer lines continue on the next two pages.

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4. (d) continued.

[illegible]

Turn over

4. (d) continued.

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(Total for Question 4 = 12 marks)

TOTAL FOR SECTION A = 30 MARKS

SECTION B**Weather Hazards and Climate Change**

Answer ALL questions in this section. Write your answer in the spaces provided.

Some questions are multiple choice. Write the letter(s) of your chosen answer(s) in the box(es) provided.

5. The global climate was different in the past.

(a) Study Figure 5 in the Resource Book.

(i) Identify the year with the lowest mean temperature.

A 1150

B 1310

C 1470

D 1920

Answer

(1 mark)

(continued on the next page)

5. (a) continued.

(ii) Calculate the range of temperatures shown in Figure 5.

You must show your working in the space below.

(2 marks)

_____ °C

(continued on the next page)

Turn over

5. continued.

(b) State ONE type of evidence for natural climate change.

(1 mark)

(c) Explain ONE negative effect that climate change is having on the environment.

(3 marks)

(Total for Question 5 = 7 marks)

Turn over

6. The atmosphere operates as a global system transferring heat and energy.

(a) Study Figure 6a in the Resource Book.

- (i) Identify ONE warm ocean current shown in Figure 6a.

- A California
- B Gulf Stream
- C Labrador
- D Peru

Answer

(1 mark)

(continued on the next page)

6. (a) continued.

(ii) Explain ONE way in which ocean currents redistribute heat energy across the Earth.

(2 marks)

(continued on the next page)

6. continued.

(b) The causes of drought are complex.

(i) Explain ONE human cause of drought.

(4 marks)

(continued on the next page)

6. (b) continued.

(ii) Explain ONE way in which the government of a country can respond to drought.

(2 marks)

(continued on the next page)

6. continued.

(c) Hurricanes develop under specific conditions.

(i) Study Figure 6b in the Resource Book.

**Calculate the number of major hurricanes
affecting the USA in 2016.**

(1 mark)

**(ii) State ONE condition of the ocean required
for a hurricane to form.**

(1 mark)

(continued on the next page)

6. (c) continued.

Natural hazards, such as hurricanes, can have serious impacts on people and the environment.

(iii) Study Figure 6c in the Resource Book.

Suggest TWO impacts of Hurricane Maria on Dominica.

Use evidence from Figure 6c in your answer.

(4 marks)

Answer lines continue on the next page.

1 _____

6. (c) (iii) continued.

2

(continued on the next page)

6. continued.

(d) Evaluate the following statement.

The impacts of hurricanes (tropical cyclones) are less serious in developed countries than in emerging or developing countries.

(8 marks)

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6. (d) continued.

[illegible]

Turn over

6. (d) continued.

[illegible]

(Total for Question 6 = 23 marks)

TOTAL FOR SECTION B = 30 MARKS

SECTION C

Ecosystems, Biodiversity and Management

Answer ALL questions in this section. Write your answers in the spaces provided.

Spelling, punctuation, grammar and specialist terminology will be assessed in Question 7e.

7. (a) The biosphere is a vital system.

(i) Define the term **biosphere**.

(1 mark)

(continued on the next page)

7. (a) continued.

Study Figure 7a in the Diagram Book which shows information about selected large-scale ecosystems.

(ii) Calculate the percentage (%) of the total land area shown in Figure 7a which is covered by temperate forest.

You must show your working in the space below.

(2 marks)

_____ %

(continued on the next page)

Turn over

7. continued.

(b) Wetlands are one of the UK's main terrestrial ecosystems.

Study Figure 7b in the Diagram Book.

(i) Plot the data from the table below on Figure 7b.

(2 marks)

Country	Area of lowland wetland (hectares)
Scotland	22 000
Wales	8 000

(continued on the next page)

7. (b) continued.

**(ii) State ONE other main terrestrial ecosystem
in the UK.**

(1 mark)

(continued on the next page)

7. continued.

(c) Tropical rainforest ecosystems are under threat.

Study Figure 7c in the Resource Book.

(i) Suggest ONE reason why this area of tropical rainforest is under threat.

Use evidence from Figure 7c in your answer.

(3 marks)

(continued on the next page)

Turn over

7. (c) continued.

Study Figure 7d below.

Figure 7d

**Forest cover in the tropical rainforest
in Brazil**

Year	Forest cover (km ²)
2000	3 505 932
2015	3 321 065

(continued on the next page)

7. (c) continued.

- (ii) Calculate the percentage (%) decrease in forest cover in the tropical rainforest in Brazil between **2000** and **2015**.

Answer to ONE decimal place.

You must show your working in the space below.

(2 marks)

_____ %

(continued on the next page)

7. (c) continued.

Study Figure 7e in the Resource Book.

(iii) Suggest TWO ways that ecotourism may help the sustainable management of this area of tropical rainforest.

Use evidence from Figure 7e in your answer.

(4 marks)

Answer lines continue on the next page.

1 _____

2 _____

Turn over

7. (c) (iii) continued.

(continued on the next page)

7. continued.

(d) Deciduous woodlands have a range of features.

Study Figure 7f in the Resource Book.

(i) Suggest TWO ways in which this deciduous woodland has adapted to the environment.

Use evidence from Figure 7f in your answer.

(4 marks)

Answer lines continue on the next page.

1 _____

7. (d) (i) continued.

2 _____

(continued on the next page)

7. (d) continued.

(ii) Explain ONE way in which climate change may be a threat to deciduous woodlands ecosystems.

(3 marks)

(continued on the next page)

7. continued.

In this question, up to four additional marks will be awarded for your spelling, punctuation, grammar and for your use of specialist terminology.

(e) Evaluate the following statement.

Climate is the most important factor influencing the distribution of different large-scale ecosystems.

(8 marks)

Answer lines continue on the next two pages.

Turn over

7. (e) continued.

[illegible]

Turn over

7. (e) continued.

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(Spelling, punctuation, grammar and use of specialist terminology = 4 marks)

(Total for Question 7 = 34 marks)

TOTAL FOR SECTION C = 34 MARKS

TOTAL FOR PAPER = 94 MARKS

END OF PAPER
