

Paper Reference 9GE0/01
Pearson Edexcel
Level 3 GCE

Total Marks

Geography
Advanced
PAPER 1

Thursday 16 May 2024 – Morning

Time: 2 hours 15 minutes

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

Surname					
Other names					
Centre Number					
Candidate Number					

Y74464A

YOU MUST HAVE

Calculator, ruler

YOU WILL BE GIVEN

Resource Booklet

Data Booklet

Turn over

INSTRUCTIONS

Answer ALL questions in Section A, and Section C.

Answer EITHER Question 2 OR Question 3 in Section B.

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

INFORMATION

The total mark for this paper is 105.

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

Calculators may be used.

Turn over

ADVICE

Read each question carefully before you start to answer it.

Check your answers if you have time at the end.

Turn over

SECTION A

Tectonic Processes and Hazards

Answer ALL questions in this section.

Turn over

- 1. Study Figure 1 in the Data Booklet.**

It is part of an investigation showing the total number of deaths caused by earthquake events for 11 years from 2011 to 2021.

(continued on the next page)

1. continued.

(a) Using the data in Figure 1,

**(i) Calculate the mean
number of deaths for these
earthquake events.**

**Give your answer to ONE
decimal place.**

**You MUST show your
working.**

(2 marks)

**Answer space is on the next
page.**

Turn over

1. (a) (i) continued.

(continued on the next page)

Turn over

1. (a) continued.

(ii) Calculate the median number of deaths caused by these earthquake events.

You MUST show your working.

(2 marks)

Answer space continues on the next page.

Turn over

1. (a) (ii) continued.

(continued on the next page)

Turn over

1. continued.

(b) Assess the importance of levels of development in understanding the impacts of tectonic hazards.

(12 marks)

Answer lines continue on the next six pages.

Turn over

1. (b) continued.

Turn over

1. (b) continued.

Turn over

1. (b) continued.

Turn over

1. (b) continued.

Turn over

1. (b) continued.

Turn over

1. (b) continued.

(Total for Question 1 = 16 marks)

TOTAL FOR SECTION A = 16 MARKS

Turn over

SECTION B

Landscape Systems, Processes and Change

**Answer ONE question in this
section – EITHER Question 2 OR
Question 3.**

**Indicate which question you are
answering by marking a cross in
the box. If you change your mind,
put a line through the box and
then indicate your new question
with a cross.**

Turn over

If you answer Question 2, put a cross in this box

☐

Glaciated Landscapes and Change

You must use the Resource Booklet provided.

Turn over

2. Study Figure 2a in the Resource Booklet.

(a) Explain how the processes of lodgement and ablation have created this relict till plain.

(6 marks)

Answer lines continue on the next two pages.

Turn over

2. (a) continued.

Turn over

2. (a) continued.

(continued on the next page)

Turn over

2. continued.

Study Figure 2b in the Resource Booklet.

(b) Suggest how glacial erosion has contributed to the formation of this landscape.

(6 marks)

Answer lines continue on the next two pages.

Turn over

2. (b) continued.

Turn over

2. (b) continued.

(continued on the next page)

Turn over

2. continued.

(c) Explain why some glacial landscapes have greater economic value than others.

(8 marks)

Answer lines continue on the next four pages.

Turn over

2. (c) continued.

Turn over

2. (c) continued.

Turn over

2. (c) continued.

Turn over

2. (c) continued.

(continued on the next page)

Turn over

2. continued.

(d) Evaluate the view that active glacial landscapes are always more fragile than relict landscapes.

(20 marks)

Answer lines continue on the next eleven pages.

Turn over

2. (d) continued.

Turn over

2. (d) continued.

Turn over

2. (d) continued.

Turn over

2. (d) continued.

Turn over

2. (d) continued.

Turn over

2. (d) continued.

Turn over

2. (d) continued.

Turn over

2. (d) continued.

Turn over

2. (d) continued.

Turn over

2. (d) continued.

Turn over

2. (d) continued.

(Total for Question 2 = 40 marks)

Turn over

Do not answer Question 3 if you have answered Question 2.

Answer ONE question in this section – EITHER Question 2 OR Question 3.

Indicate which question you are answering by marking a cross in the box. If you change your mind, put a line through the box and then indicate your new question with a cross.

Turn over

If you answer Question 3, put a cross in this box

☐

Coastal Landscapes and Change

You must use the Resource Booklet provided.

Turn over

3. Study Figure 3a in the Resource Booklet.

(a) Explain how sea level change contributes to the formation of emergent coastlines.

(6 marks)

Answer lines continue on the next two pages.

Turn over

3. (a) continued.

Turn over

3. (a) continued.

(continued on the next page)

Turn over

3. continued.

Study Figure 3b in the Resource Booklet.

(b) Explain how sediment transport and deposition contribute to the formation of this landscape.

(6 marks)

Answer lines continue on the next two pages.

Turn over

3. (b) continued.

Turn over

3. (b) continued.

(continued on the next page)

Turn over

3. continued.

(c) Explain the role of mass movement in creating distinctive coastal landforms.

(8 marks)

Answer lines continue on the next four pages.

Turn over

3. (c) continued.

Turn over

3. (c) continued.

Turn over

3. (c) continued.

Turn over

3. (c) continued.

(continued on the next page)

Turn over

3. continued.

(d) Evaluate the view that the higher the level of economic development the greater the consequences of coastal flooding.

(20 marks)

Answer lines continue on the next eleven pages.

Turn over

3. (d) continued.

Turn over

3. (d) continued.

Turn over

3. (d) continued.

Turn over

3. (d) continued.

Turn over

3. (d) continued.

Turn over

3. (d) continued.

Turn over

3. (d) continued.

Turn over

3. (d) continued.

Turn over

3. (d) continued.

Turn over

3. (d) continued.

Turn over

3. (d) continued.

(Total for Question 3 = 40 marks)

TOTAL FOR SECTION B = 40 MARKS

Turn over

SECTION C

Physical Systems and Sustainability

**Answer ALL questions in this
section.**

**You must use the Resource
Booklet provided.**

Turn over

4. Study Figure 4 in the Resource Booklet.

(a) Suggest ONE possible impact of the changes shown on forest ecosystems.

(3 marks)

Answer lines continue on the next page.

Turn over

4. (a) continued.

(continued on the next page)

Turn over

4. continued.

**(b) Explain why hard engineering
may increase the risk of river
flooding in some places.**

(6 marks)

**Answer lines continue on the
next two pages.**

Turn over

4. (b) continued.

Turn over

4. (b) continued.

(continued on the next page)

Turn over

4. continued.

**(c) Explain the role of
photosynthesis in the ocean on
the carbon cycle.**

(8 marks)

**Answer lines continue on the
next four pages.**

Turn over

4. (c) continued.

Turn over

4. (c) continued.

Turn over

4. (c) continued.

Turn over

4. (c) continued.

(continued on the next page)

Turn over

4. continued.

(d) Assess the impact of increasing ocean acidification on people and marine ecosystems.

(12 marks)

Answer lines continue on the next six pages.

Turn over

4. (d) continued.

Turn over

4. (d) continued.

Turn over

4. (d) continued.

Turn over

4. (d) continued.

Turn over

4. (d) continued.

Turn over

4. (d) continued.

(continued on the next page)

Turn over

4. continued.

**(e) Evaluate the view that
trans—boundary water conflicts
will inevitably increase in the
future.**

(20 marks)

**Answer lines continue on the
next eleven pages.**

Turn over

4. (e) continued.

Turn over

4. (e) continued.

Turn over

4. (e) continued.

Turn over

4. (e) continued.

Turn over

4. (e) continued.

Turn over

4. (e) continued.

Turn over

4. (e) continued.

Turn over

4. (e) continued.

Turn over

4. (e) continued.

Turn over

4. (e) continued.

Turn over

4. (e) continued.

(Total for Question 4 = 49 marks)

TOTAL FOR PAPER = 105 MARKS

END OF PAPER