

Tuesday 5 October 2021 – Morning

A Level Geography

H481/01 Physical systems

Time allowed: 1 hour 30 minutes



- the OCR 12-page Answer Booklet
- the Resource Booklet (inside this document)

You can use:

- a ruler (cm/mm)
- · a scientific or graphical calculator

INSTRUCTIONS

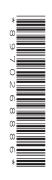
- Use black ink. You can use an HB pencil, but only for graphs and diagrams.
- Write your answer to each question in the Answer Booklet. The question numbers must be clearly shown.
- · Fill in the boxes on the front of the Answer Booklet.
- Choose one option in Section A and answer all the questions for that option. Answer all
 the questions in Section B.

INFORMATION

- The total mark for this paper is 66.
- The marks for each question are shown in brackets [].
- Quality of extended response will be assessed in questions marked with an asterisk (*).
- This document has 8 pages.

ADVICE

- Try to answer every part of each question you choose.
- Read each question carefully before you start your answer.



Section A – Landscape Systems

Answer **all** questions from **one** option.

Option A - Coastal Landscapes

- 1 (a) Explain how geology influences coastal landscape systems. [8]
 - (b) Study Fig. 1, which shows sources of global coastal sediment.
 - (i) Using evidence from Fig. 1, comment on the usefulness of this data presentation technique. [3]
 - (ii) Using evidence from Fig. 1, describe the pattern shown. [3]
 - (iii) With reference to **Fig. 1**, explain **one** way in which this distribution may change in the future. [3]
 - (c)* 'The changes caused by human activity in coastal landscapes are always negative.'

 Discuss.

 [16]

Option B – Glaciated Landscapes

- 2 (a) Explain how geology influences glaciated landscape systems. [8]
 - (b) Study Fig. 2, which shows types of global glaciated and periglacial landscapes.
 - (i) Using evidence from Fig. 2, comment on the usefulness of this data presentation technique. [3]
 - (ii) Using evidence from Fig. 2, describe the pattern shown. [3]
 - (iii) With reference to Fig. 2, explain one way in which this distribution may change in the future. [3]
 - (c)* 'The changes caused by human activity in glaciated landscapes are always negative.'

 Discuss.

 [16]

Option C – Dryland Landscapes

- 3 (a) Explain how geology influences dryland landscape systems. [8]
 - (b) Study Fig. 3, which shows types of global dryland landscapes.
 - (i) Using evidence from Fig. 3, comment on the usefulness of this data presentation technique. [3]
 - (ii) Using evidence from Fig. 3, describe the pattern shown. [3]
 - (iii) With reference to Fig. 3, explain one way in which distribution may change in the future.
 [3]
 - (c)* 'The changes caused by human activity in dryland landscapes are always negative.'

 Discuss.

 [16]

Section B - Earth's Life Support Systems

Answer all questions.

- 4 (a) Study Fig. 4, which shows a satellite image of a phytoplankton bloom in the Bay of Biscay.
 - (i) Using evidence from **Fig. 4**, identify **three** limitations of this data presentation technique. [3]
 - (ii) With reference to **Fig. 4**, suggest **two** ways the phytoplankton bloom would influence the carbon cycle. [4]
 - (b) Examine how water extraction influences flows and stores in the water cycle. [10]
 - (c)* Assess the impact of long-term climate change on the water and carbon cycles. [16]

END OF QUESTION PAPER

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