



Oxford Cambridge and RSA

# Tuesday 06 October 2020 – Morning

## A Level Geography

### H481/01 Physical systems

**Time allowed: 1 hour 30 minutes**



**You must have:**

- 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 the influence of climate change on raised beaches. [8]
- (b) Study **Fig. 1** in the Resource Booklet, which shows a GIS satellite image of Anacapa Island, California, USA.
- (i) Measure the distance from **A** to **B**. [1]
- (ii) Name landform **C**. [1]
- (iii) Explain **three** advantages of this data presentation technique. [3]
- (c) Study **Fig. 2** in the Resource Booklet, Eastbourne, Sussex, UK.
- Using **Fig. 2**, suggest how management strategy **D** could influence the coastal landscape. [4]
- (d)\* Using a case study, assess the extent to which landforms within a low energy coastal environment are inter-related. [16]

**Option B – Glaciated Landscapes**

- 2 (a) Explain the influence of climate change on kames. [8]
- (b) Study **Fig. 3** in the Resource Booklet, which shows a GIS satellite image of Rodman Glacier, Alaska, USA.
- (i) Measure the distance from **E** to **F**. [1]
- (ii) Name landform **G**. [1]
- (iii) Explain **three** advantages of this data presentation technique. [3]
- (c) Study **Fig. 4** in the Resource Booklet, Aklavik, Canada.
- Using **Fig. 4**, suggest how human activity **H** could influence the periglacial landscape. [4]
- (d)\* Using a case study, assess the extent to which landforms within a valley glacier system are inter-related. [16]

### Option C – Dryland Landscapes

- 3 (a) Explain the influence of climate change on pediments. [8]
- (b) Study **Fig. 5** in the Resource Booklet, which shows a GIS satellite image of Death Valley, California, USA.
- (i) Measure the distance from **I** to **J**. [1]
- (ii) Name landform **K**. [1]
- (iii) Explain **three** advantages of this data presentation technique. [3]
- (c) Study **Fig. 6** in the Resource Booklet, Nevada, USA.
- Using **Fig. 6**, suggest how management strategy **L** could influence the dryland landscape. [4]
- (d)\* Using a case study, assess the extent to which landforms within a low latitude desert are inter-related. [16]

**Section B – Earth's Life Support Systems**

Answer **all** questions.

- 4 (a) Study **Fig. 7** in the Resource Booklet, a graph showing the relationship between altitude and carbon content in the soil of the equatorial forest in Ecuador and significance test data.
- (i) State the direction of the relationship shown on the graph. [1]
  - (ii) State whether the relationship is statistically significant and justify your answer. [3]
  - (iii) Suggest **one** reason for this relationship. [3]
- (b) Examine the extent to which an individual tree can influence the water and carbon cycles within a tropical rainforest. [10]
- (c)\* Assess the importance of water for humans. [16]

**END OF QUESTION PAPER**

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