



Oxford Cambridge and RSA

A Level Geography

H481/01 Physical Systems

Practice Paper

Time allowed: 1 hour 30 minutes

You must have:

- the Resource Booklet (inserted)
- the OCR 12-page Answer Booklet (OCR12 sent with general stationery)

You may use:

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

INSTRUCTIONS

- The separate Resource Booklet will be found inside this document.
- Use black ink. You may use an HB pencil for graphs and diagrams.
- Section A: Choose **one** option and answer **all** parts of the question in the option.
- Section B: Answer **all** questions.
- Write your answer to each question in the Answer Booklet. Additional paper may be used if required but you must clearly show your candidate number, centre number and question number(s).
- Do **not** write in the barcodes.

INFORMATION

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

Section A – Landscape Systems

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

Option A – Coastal Landscapes

- 1 (a) With reference to a **case study**, explain the influence of **unintentional** human activity on coastal landscapes. [8]
- (b) Study **Fig. 1a**, a cliff at Cathedral Cove, New Zealand and **Fig. 1b**, a cliff at Praia da Luz, Portugal.
- (i) Using evidence from **Fig. 1a and Fig. 1b**, compare and contrast the characteristics of the two cliffs shown. [4]
- (ii) With reference to **either Fig. 1a or Fig. 1b**, explain how flows of energy have shaped the cliff. [3]
- (c) Study **Table 1** which shows the tide timetable for Beach A and Beach B on the 15th August 2017.

	Beach A		Beach B	
	Time	Height (m)	Time	Height (m)
Low tide	0152	0.72	0437	2.64
High tide	0755	5.38	1046	6.97
Low tide	1430	1.13	1719	2.41
High tide	2030	5.16	2344	7.20

Table 1 Tide timetable for Beach A and Beach B

Calculate the **maximum** tidal range of the beach with the **largest** tidal range. You must show your working. [2]

- (d)* 'Cooling climates rather than warming climates have a more significant influence on coastal landscapes.' How far do you agree with this view? [16]

Option B – Glaciated Landscapes

- 2 (a) With reference to a **case study**, explain the influence human activity has on **periglacial** landscapes. [8]
- (b) Study **Fig. 2a**, D'Aosta Valley, Italy and **Fig. 2b**, Tunnel Valley, USA.
- (i) Using evidence from **Fig. 2a and Fig. 2b**, compare and contrast the characteristics of the two valleys shown. [4]
- (ii) With reference to **either Fig. 2a or Fig. 2b**, explain how flows of energy have shaped the valley. [3]
- (c) Study **Table 2**, which shows the mean altitude of glaciers in the Alps and Rockies.

Glacier	1	2	3	4	5	6	7
Alps	3893	4334	3973	3330	3807	4014	3356
Rockies	3445	3654	2643	3713	3350	2641	2809

Table 2 Mean altitude (metres) of glaciers in the Alps and Rockies

Calculate the altitude range of the glaciated landscape with the **largest** altitude range. You must show your working. [2]

- (d)* 'Interglacial periods rather than glacial periods have a more significant influence on glaciated landscapes.' How far do you agree with this view? [16]

Option C – Dryland Landscapes

- 3 (a) With reference to a **case study**, explain the influence of water supply issues on dryland landscapes. [8]
- (b) Study **Fig. 3a**, a sand dune in the Namib Desert, Namibia and **Fig. 3b**, a sand dune in the Gobi Desert, China.
- (i) Using evidence from **Fig. 3a and Fig. 3b**, compare and contrast the characteristics of the two sand dunes shown. [4]
- (ii) With reference to **either Fig. 3a or Fig. 3b**, explain how flows of energy have shaped the sand dune. [3]
- (c) Study **Table 3**, which shows the annual precipitation for Fort Yukon, Alaska and Phoenix, Arizona.

	January	February	March	April	May	June	July	August	September	October	November	December
Fort Yukon, Alaska	11	8	8	6	8	20	23	29	22	14	10	10
Phoenix, Arizona	20	14	22	8	3	3	20	24	17	15	15	22

Table 3 Annual precipitation (mm) for Fort Yukon, Alaska and Phoenix, Arizona

Calculate the annual precipitation range of the dryland landscape with the **largest** precipitation range. You must show your working. [2]

- (d)* 'Past climatic conditions rather than present climatic conditions have a more significant influence on dryland landscapes.' How far do you agree with this view? [16]

Section B – Earth’s Life Support Systems

Answer **all** questions.

- 4 (a)** Study **Fig. 4**, the global carbon cycle for the 1990s.
- (i)** With reference to **Fig. 4**, suggest how human activities affected the size of flows and stores in the carbon cycle. **[4]**
 - (ii)** Explain **three** reasons why the data in **Fig. 4** may be inaccurate. **[3]**
- (b)** Examine how physical and human factors disturb and enhance natural processes and stores in the water cycle of the Arctic Tundra. **[10]**
- (c)*** To what extent can global management strategies be used to reverse long-term changes in the water and carbon cycles? **[16]**

END OF QUESTION PAPER

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