

Friday 27 May 2022 – 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)
- the OS Map (inside this document)

You can use:

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

INSTRUCTIONS

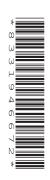
- Use black ink. You can use an HB pencil, but only for graphs and diagrams.
- Write your answer to each question in the Answer Booklet. The question numbers must be clearly shown.
- · Fill in the boxes on the front of the Answer Booklet.
- Choose one option in Section A and answer all the questions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

[8]

[16]

(a) Explain how coastal landscapes can be viewed as systems.

Option A – Coastal landscapes

short-term changes?

1

(b) Study Fig. 1, which shows the relationship between spending on coastal management and time in England.
(i) Comment on one advantage of this data presentation technique.
[2]
(ii) Describe the relationship shown.
[2]
Study Fig. 2, which shows a correlation coefficient calculated for the data in Fig. 1 and a table of critical values for a significance test.
(iii) With reference to Fig. 2, test the significance of this relationship.
[3]
(iv) Suggest one reason for this relationship.
[2]
(c)* To what extent are long-term changes more influential on coastal landscape systems than

Option B – Glaciated landscapes

- 2 (a) Explain how glaciated landscapes can be viewed as systems. [8]
 - **(b)** Study **Fig. 3**, which shows the relationship between spending on oil pipeline management and time in Alaska, USA.
 - (i) Comment on **one** advantage of this data presentation technique. [2]
 - (ii) Describe the relationship shown. [2]

Study **Fig. 4**, which shows a correlation coefficient calculated for the data in **Fig. 3** and a table of critical values for a significance test.

- (iii) With reference to Fig. 4, test the significance of this relationship. [3]
- (iv) Suggest one reason for this relationship. [2]
- (c)* To what extent are long-term changes more influential on glaciated landscape systems than short-term changes? [16]

Option C - Dryland landscapes

- 3 (a) Explain how dryland landscapes can be viewed as systems. [8]
 - **(b)** Study **Fig. 5**, which shows the relationship between spending on water supply management and time in the USA.
 - (i) Comment on **one** advantage of this data presentation technique. [2]
 - (ii) Describe the relationship shown. [2]

Study **Fig. 6**, which shows a correlation coefficient calculated for the data in **Fig. 5** and a table of critical values for a significance test.

- (iii) With reference to Fig. 6, test the significance of this relationship. [3]
- (iv) Suggest **one** reason for this relationship. [2]
- (c)* To what extent are long-term changes more influential on dryland landscape systems than short-term changes? [16]

Section B – Earth's life support systems

Answer **all** the questions.

4	4 (a) Study Fig. 7, OS map of Wiston Park, UK.			
	((i)	Comment on one advantage of this data presentation technique.	[2]
	(ii)	State the distance in kilometres between 145124 and 155124.	[1]
	(i	ii)	Suggest two reasons for differences in characteristics of the water cycle between Area A and Area B .	[4]
(b) Examine the extent to which the developing oil and gas industry affe the Arctic tundra.		mine the extent to which the developing oil and gas industry affects the water cycle in Arctic tundra.	[10]	
	(c)* /	Ass	ess the importance of carbon to humans.	[16]

END OF QUESTION PAPER

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