

# **Tuesday 5 October 2021 – 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	<b>(a)</b> E	Explain how geology influences coastal landscape systems.	[8]
	(b) S	Study Fig. 1, which shows sources of global coastal sediment.	
	(	(i) Using evidence from Fig. 1, comment on the usefulness of this data presentat technique.	ion <b>[3]</b>
	<b>(</b> i	(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 future.		
(c)* 'The changes caused by human activity in coastal landscapes are always negative.' Discuss.			

# **Option B – Glaciated Landscapes**

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<b>(a)</b> Exp	plain how geology influences glaciated landscape systems.	[8]		
<b>(b)</b> Stu	(b) Study Fig. 2, which shows types of global glaciated and periglacial landscapes.			
(i)	Using evidence from <b>Fig. 2</b> , comment on the usefulness of this data presentati technique.	ion <b>[3]</b>		
(ii)	Using evidence from Fig. 2, describe the pattern shown.	[3]		
(iii)	With reference to <b>Fig. 2</b> , explain <b>one</b> way in which this distribution may change in t future.	the <b>[3]</b>		
<ul> <li>(c)* 'The changes caused by human activity in glaciated landscapes are always negative.'</li> <li>Discuss.</li> </ul>				

# **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 present technique.	tation [3]		
(ii	Using evidence from Fig. 3, describe the pattern shown.	[3]		
(iii	With reference to <b>Fig. 3</b> , explain <b>one</b> way in which distribution may change in the future			
(c)* 'The changes caused by human activity in dryland landscapes are always negative.' Discuss.				

#### 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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