

Please write clearly in	n block capitals.	
Centre number	Candidate number	
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GCSE GEOGRAPHY

Paper 1 Living with the Physical Environment

Monday 18 May 2020 Morning Time allowed: 1 hour 30 minutes

Materials

For this paper you must have:

- a pencil
- a rubber
- a ruler.

You may use a calculator.

Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.

Answer all questions in Section A and Section B.

Answer two questions in Section C.

For Examiner's Use	
Question	Mark
1	
2	
3	
4	
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TOTAL	

- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The total number of marks available for this paper is 88.
- HIC is a higher income country.
- LIC is a lower income country.
- NEE is a newly emerging economy.
- Spelling, punctuation, grammar and specialist terminology will be assessed in Question 01.12.



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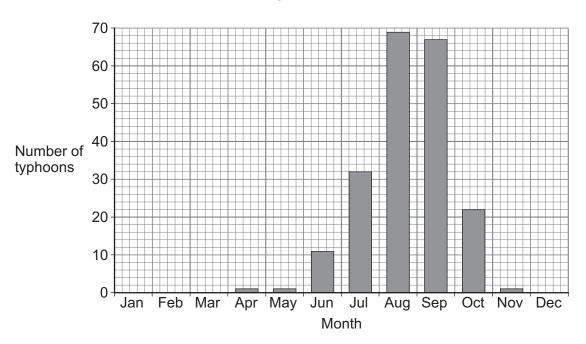
For the mu	ıltipl	e-choice questions, shade the circle next to the correct answer.	
CORRECT M	ETH	OD WRONG METHODS 🕸 💿 🗐	
If you want	to c	change your answer you must cross out your original answer as shown.	
If you wish select as sl		eturn to an answer previously crossed out, ring the answer you now wish n.	to
		Section A The challenge of natural hazards	
		Answer all questions in this section.	
Question 1	Th	e challenge of natural hazards	
0 1 - 1	Wh	nich one of the following statements about tropical storms is true?	
	Sh	ade one circle only.	[1 mark]
	A	Tropical storms gain energy as they reach land.	
	В	Tropical storms develop along the Equator.	0
	С	Tropical storms occur in areas of high pressure.	0
	D	Tropical storms form above oceans where temperatures are over 27 °C.	0
		Question 1 continues on the next page	





Study **Figure 1**, a graph showing the number of tropical storms (typhoons) that reached Japan in each month from 1851 to 2018.





0 1 . 2 The total number of typhoons reaching Japan was 204.

What percentage of the total number of typhoons occurred in August?

Give your answer to the nearest whole percentage.

[2 marks]

Show your working	
	%

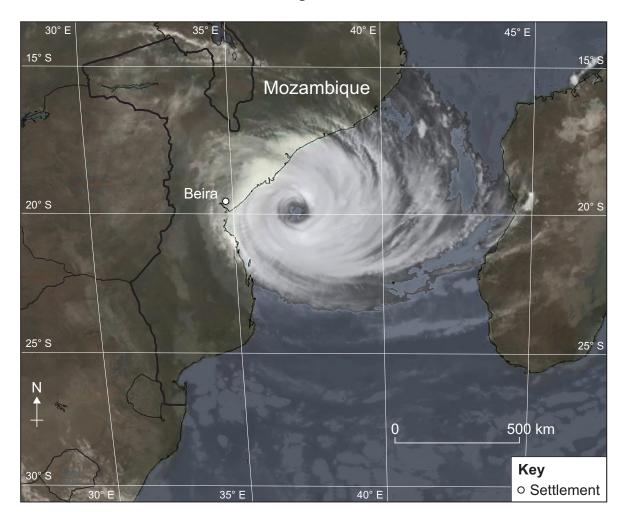
0 1 . 3 Give one reason why tropical storms have a seasonal pattern.

[1 mark]



Study **Figure 2**, a satellite image showing Cyclone Idai approaching Mozambique, Africa in March 2019.

Figure 2



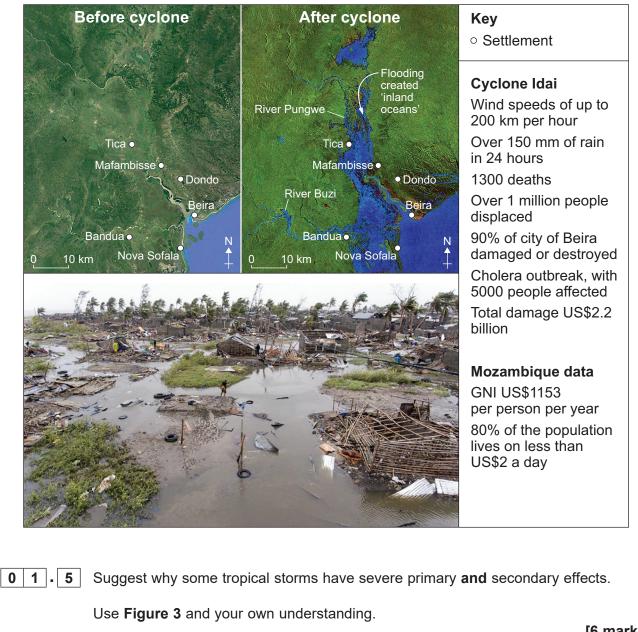
[2 marks]	Describe the structure of Cyclone Idai shown in Figure 2 .	0 1 . 4

Question 1 continues on the next page



Study Figure 3, information about Cyclone Idai and its impacts on Mozambique.

Figure 3



Use Figure 3 and your own understanding.	[6 m

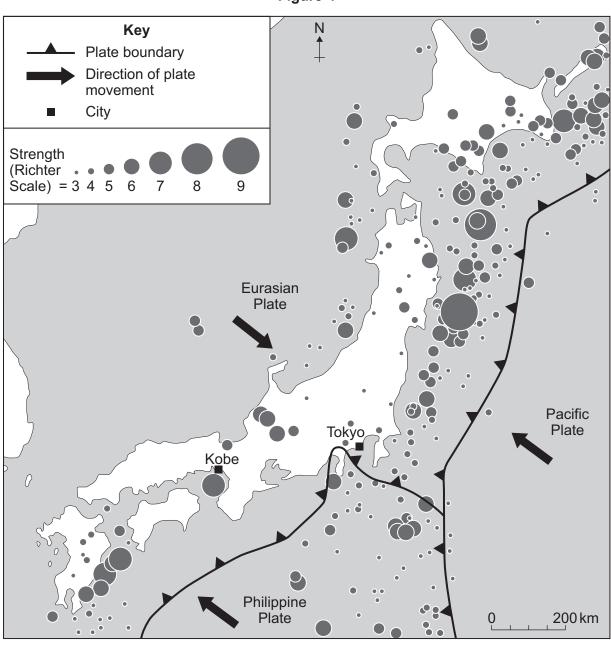


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Study Figure 4, a map showing the distribution of earthquakes in and around Japan.







Us	ing Figure 4, which one of the following statements is true?	
Sh	ade one circle only.	[1 mark]
Α	Most of the stronger earthquakes happened on land.	
В	Most earthquakes happened to the east and south east of Japan.	
С	Most earthquakes around Japan were over 7 on the Richter Scale.	
D	No earthquakes greater than 5 on the Richter Scale happened to the west of Japan.	0
		[1 mark]
		shown in
	Question 1 continues on the next page	
	Sh A B C D Us pla	C Most earthquakes around Japan were over 7 on the Richter Scale. D No earthquakes greater than 5 on the Richter Scale happened to the west of Japan. Using Figure 4, name the type of plate margin between the Pacific and Eurplates. Suggest one other tectonic hazard likely to occur near to the plate margins Figure 4.



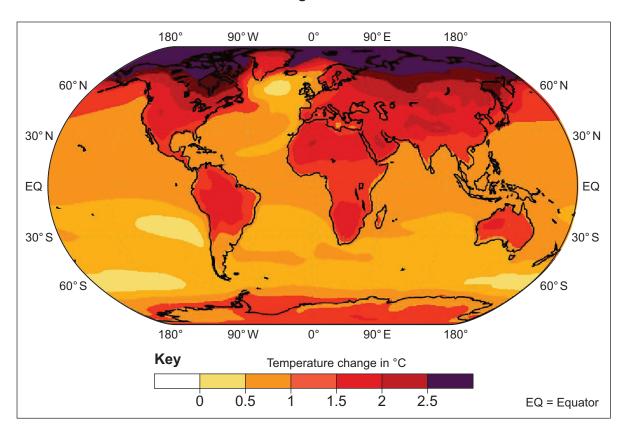
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0 1 9	Explain how the risks of a tectonic hazard can be reduced.	[4 marks]
	Extra space	
0 1 . 1 0	State one source of evidence for long-term climate change during the C period.	Quaternary



Study **Figure 5**, a world map showing projected global temperature change between 2000 and 2100.

Figure 5



0 1 . 1 1 Using **Figure 5**, which **one** of the following statements is true?

Shade **one** circle only.

[1 mark]

- **A** The greatest increase in temperature will be along the Equator.
- 0
- **B** Most of Africa will have a rise in temperature of between 0 °C and 0.5 °C.
- 0
- **C** The oceans will show a greater increase in temperature than land areas.
- 0
- **D** Areas north of 60 °N will have the greatest increase in temperature.

0

Question 1 continues on the next page



Study Figure 6, photographs showing strategies used to manage climate change	e.
Figure 6	
Carbon Capture image cannot be reproduced here due to third-party copyright restrictions.	



0 1 . 1 2	'Managing climate change involves both reducing causes (mitigation) and
	responding to change (adaptation).'
	Do you agree?
	Explain your answer.
	Use Figure 6 and your own understanding.
	[9 marks] [+3 SPaG marks]
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	End of Section A	



Section B The living world

	Answer all questions in this section.	
Question 2	The living world	
0 2 . 1	For a small scale ecosystem you have studied, name one producer and one consumer.	[2 marks]
	Producer	
	Consumer	
0 2.2	What is the role of producers in an ecosystem?	[1 mark]

Question 2 continues on the next page





Study Figure 7, which shows annual climate data for two different environments.

Figure 7

Place A

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall (mm)	3	2	1	1	0	1	0	0	0	4	7	8
Average temperature (°C)	16.0	16.7	17.9	18.6	20.3	21.4	23.3	23.9	23.3	22.3	20.1	15.4

Place B

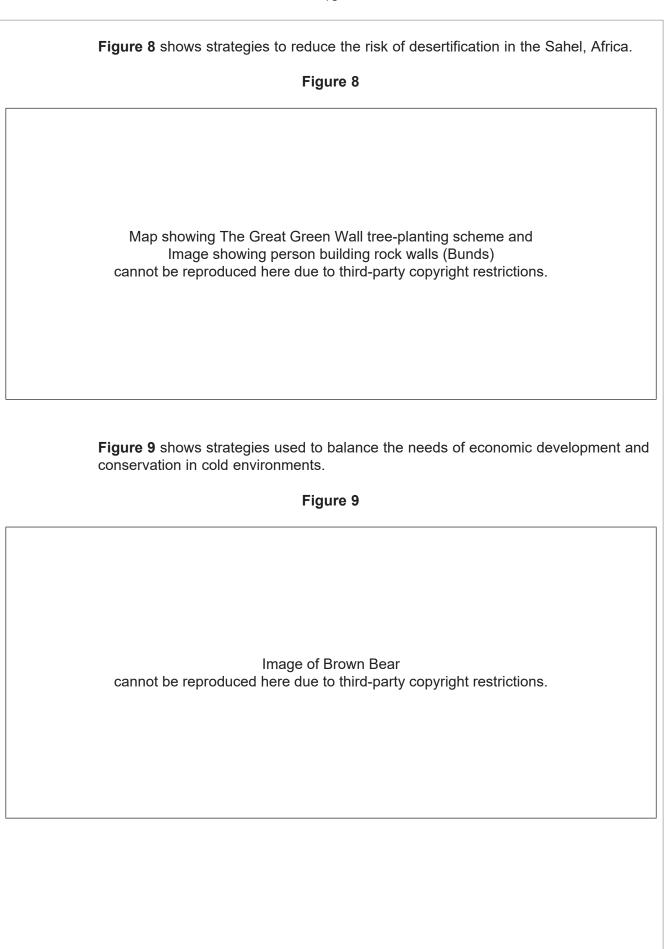
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall (mm)	16	20	21	12	9	11	16	28	26	17	19	18
Average temperature (°C)	-14.0	-14.5	-13.3	-10.6	-3.5	2.6	6.2	5.1	1.0	-4.9	-8.7	-12.2

0 2 . 3	Using Figure 7 , calculate the temperature range in Place A . [1 mark]
	°C
0 2.4	Using Figure 7 , state two differences between the climate in Place A and Place B . [2 marks]
	1
	2



0 2 . 5		nich global ecosystem matches the following description?	
	An	area with trees which drop their leaves in winter.	
	Sh	ade one circle only.	[1 mark]
	Α	Tundra.	
	В	Tropical grassland.	
	С	Deciduous forest.	
	D	Tropical rainforest.	
		Question 2 continues on the next page	







0 2 . 6	Suggest how different strategies are used to reduce environmental damage in either :
	 an area on the fringe of a hot desert or a cold environment.
	Use Figure 8 or Figure 9 and your own understanding. [6 marks]
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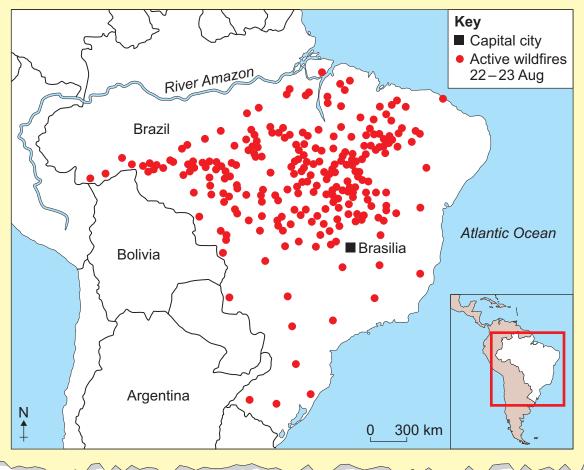


Study Figure 10, a newspaper article about wildfires in Brazil in August 2019.

Figure 10

Brazil wildfires release stored carbon, scientists warn

2019 has seen an increase in illegal burning in the Brazil rainforest as farmers and loggers use fires to clear land. Scientists warn that these fires are a major threat to global climate.



0 2 . 7	Using Figure 10, give one feature of the pattern of wildfires in Brazil.	[1 mark]



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0 2 . 8	Outline one reason why wildfires are a threat to global climate.	[2 marks]
	Question 2 continues on the next page	



Study Figure 11, which shows some causes of deforestation in tropical rainforests.

Figure 11

Shifting cultivation



Ecotourism resort in the Amazon



Palm oil plantation in Indonesia



Hydro-electric dam in Brazil



0 2 . 9	'Some economic activities in tropical rainforests have major environmental impacts.'
	Do you agree?
	Use Figure 11 and a case study to explain your answer. [9 marks]



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End of Section B

Turn over ▶

25



Section C Physical landscapes in the UK

Answer two questions from the following:

Question 3 (Coasts), Question 4 (Rivers), Question 5 (Glacial).

Question 3 Coastal landscapes in the UK

Study Figure 12, opposite, a physical map of the British Isles.

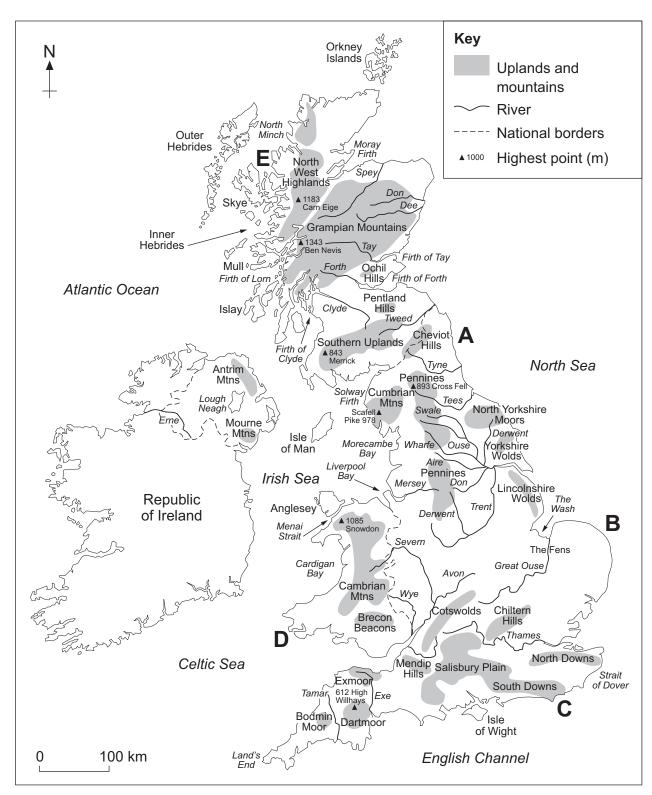
Match the following descriptions of coastal landscapes in the UK with the correct letter shown on **Figure 12**.

[2 marks]

Description of coastal landscape	Letter
An uneven coastline with several large islands offshore	
A headland which marks the coastal limit of the South Downs	







Question 3 continues on the next page



Study **Figure 13**, an image showing a coastal realignment scheme at Medmerry, West Sussex.

Figure 13



0 3 - 2	Using Figure 13 , state what has happened to the area behind the shingle beach at high tide.
	[1 mark]
0 3.3	Suggest one advantage of the coastal management strategy shown in Figure 13 . [1 mark]



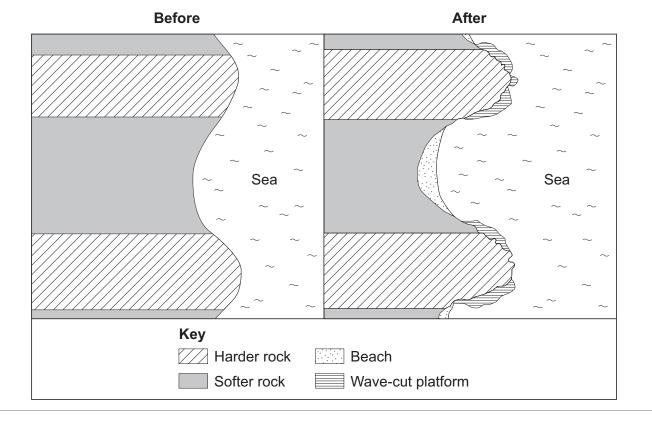
Study Figure 14, a graph showing rates of erosion at a coastal site between 2000 and 2018. Figure 14 3.5 3.0 2.5 Rate of erosion 2.0 (metres per year) 1.5 1.0 0.0 1995 2000 2010 2015 2005 2020 2025 2030 Year Using Figure 14, what is the projected rate of erosion for 2030? [1 mark] _ metres per year Explain the benefits of using hard engineering strategies to protect the coastline. [4 marks] Extra space



Study **Figure 15**, a photograph of part of Dorset, and sketch maps showing changes in the shape of a coastline over time.

Figure 15







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0 3 . 6	Explain the formation of the physical features of the coastline shown in Figure 15 . [6 marks]
	Extra space

15

End of Question 3



Question 4 River landscapes in the UK

Study Figure 16, opposite, a physical map of the British Isles.

0 4 . 1 Match the following descriptions of rivers in the UK with the correct letter shown on Figure 16.

[2 marks]

Description of river	Letter
A river which flows west from the Pennines into Liverpool Bay	
A river which flows north east through the Fens and into the Wash	





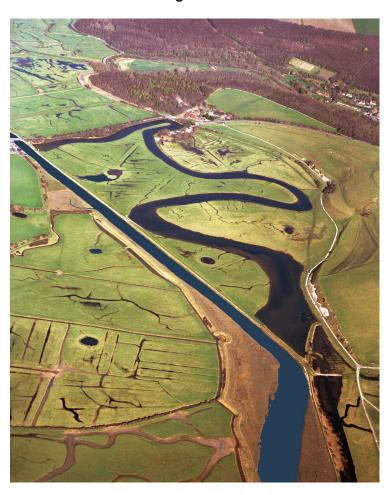


Question 4 continues on the next page



Study **Figure 17**, a photograph showing river straightening along the River Cuckmere in East Sussex.

Figure 17



0 4 . 2	Using Figure 17 , describe the relief (height and shape of the land) on either the straightened river.	er side of
		[1 mark]
0 4 . 3	Suggest how the strategy shown in Figure 17 helps to manage the river.	[1 mark]



Study Figure 18, a graph showing maximum discharge for a river between 2000 and 2018. Figure 18 25 20 Maximum 15 discharge (in cubic metres per 10 second) 5 0 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 Year Using Figure 18, calculate the range of maximum discharge. [1 mark] cubic metres per second Explain how river levées are formed. [4 marks] Extra space _



Study **Figure 19**, information about Cockermouth and the impact of Storm Desmond in December 2015.

Figure 19



Flood risk factors

- 340 millimetres of rain fell in the area in 24 hours.
- Cockermouth is located at the confluence (meeting point) of two rivers.
- The surrounding landscape consists of steep hills.
- Many homes and businesses are built on the flood plains of the local rivers.

0 4 . 6	Explain how physical and human factors may affect flood risk.	
	Use Figure 19 and your own understanding.	[6 marks]



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End of Question 4



Question 5 Glacial landscapes in the UK

Study Figure 20, opposite, a physical map of the British Isles.

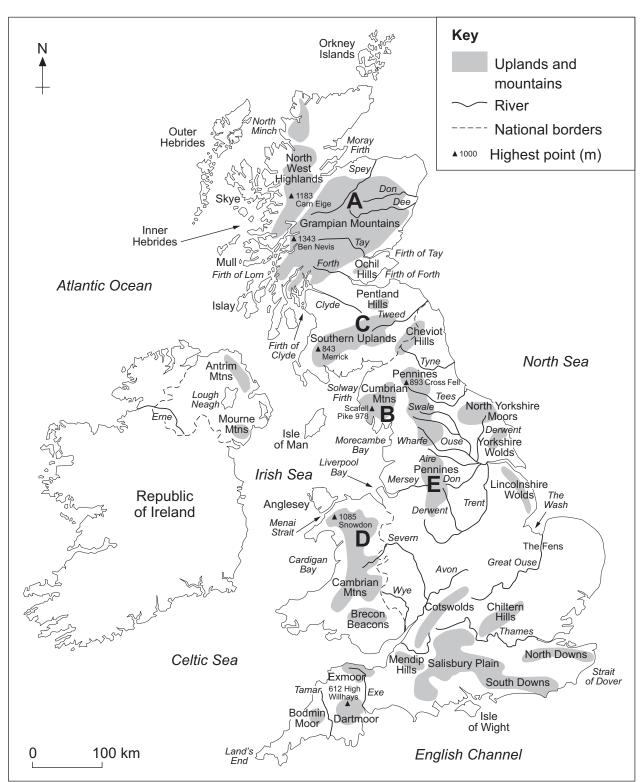
0 5 . 1 Match the following descriptions of glaciated uplands in the UK with the correct letter shown on **Figure 20**.

[2 marks]

Description of glaciated upland area	Letter
A mountainous area that includes the highest point in Wales	
A large mountainous area in Scotland where the highest point is over 1300 m	





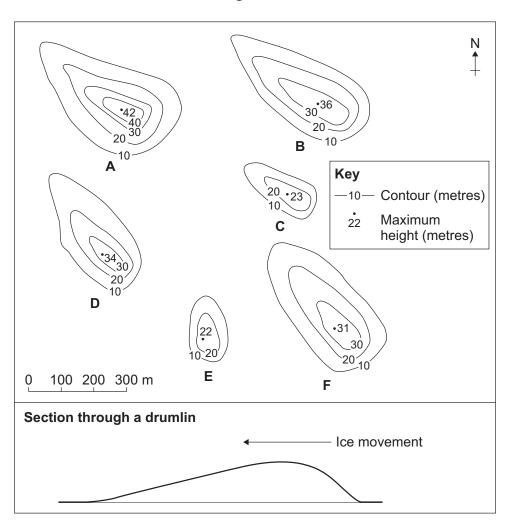


Question 5 continues on the next page



Study Figure 21, a contour map and cross section showing 6 drumlins labelled A-F.

Figure 21



0 5.2	Describe the shape of the drumlins shown in Figure 21.	[1 mark]
0 5.3	Using Figure 21 , calculate the mean maximum height of the 6 drumlins.	[1 mark]
	m	



0 5.4	Using evidence from Figure 21 , suggest the general direction of moveme when the drumlins were formed.	nt of ice [1 mark]
0 5.5	Explain how glaciated areas in the UK provide economic opportunities.	[4 marks]
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	Question 5 continues on the next page	



	٦.
Figure 22	
Image showing landform of glacial erosion (Corrie) cannot be reproduced here due to third-party copyright restrictions.	

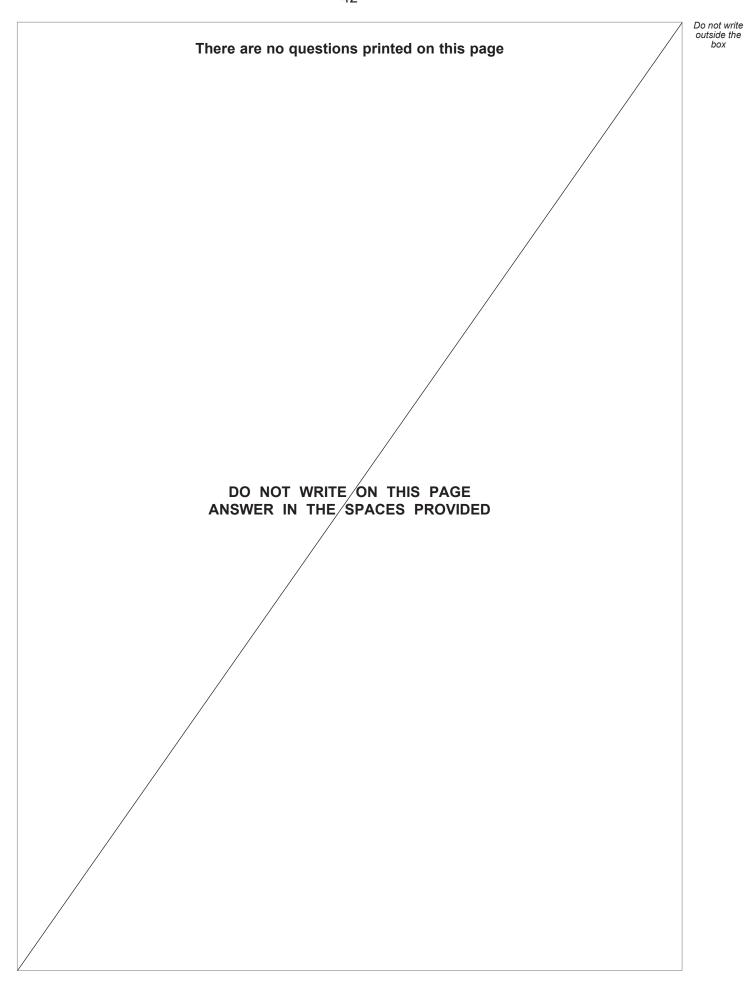


0 5 . 6	Explain how glacial processes have created the landforms shown in Figur	e 22. [6 marks]
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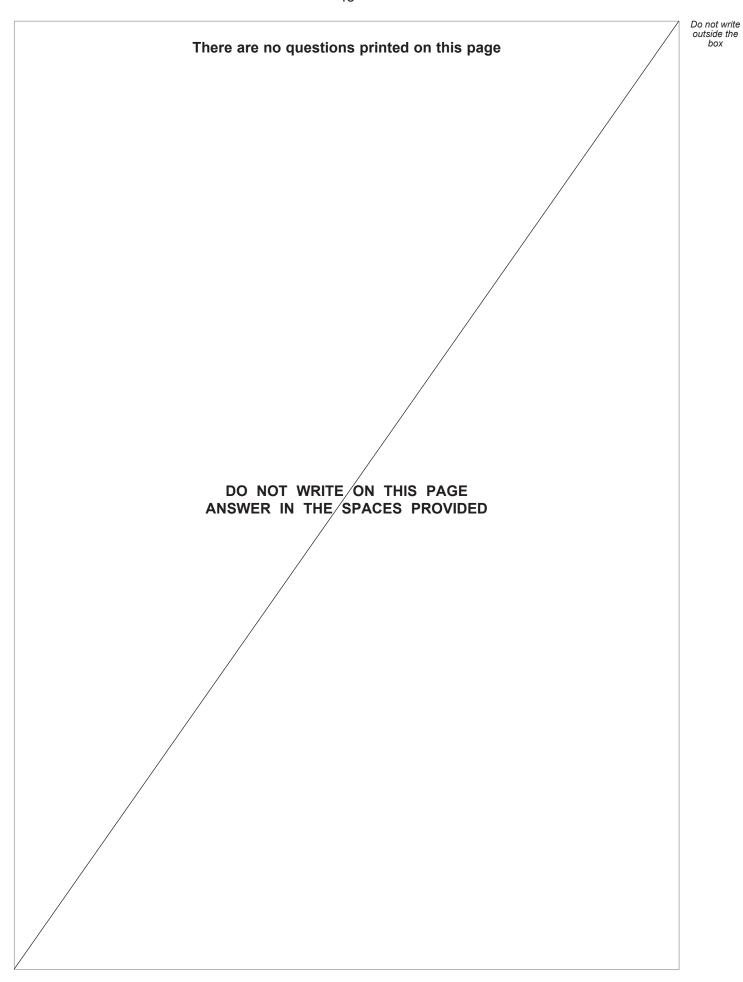
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END OF QUESTIONS











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