

## Cambridge Pre-U

GEOGRAPHY 9768/44

Paper 4 Research Topic

May/June 2022 1 hour 5 minutes

You must answer on the answer booklet/paper.

You will need: Answer booklet/paper

Insert (enclosed)

### **INSTRUCTIONS**

Answer two questions in total:

Choose Section A, B or C according to your research topic.

Answer two questions from the same section.

For Section A, answer Question 1 and Question 2.

For Section B, answer Question 3 and Question 4.

For Section C, answer Question 5 and Question 6.

- If you have been given an answer booklet, follow the instructions on the front cover of the answer booklet.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number on all the work you hand in.
- Do not use an erasable pen or correction fluid.
- You should support your answers with appropriate examples, sketch maps and diagrams.
- At the end of the examination, fasten all your work together. Do not use staples, paper clips or glue.

### **INFORMATION**

- The total mark for this paper is 35.
- The number of marks for each question or part question is shown in brackets [].
- The insert contains all the resources referred to in the questions.

This syllabus is regulated for use in England, Wales and Northern Ireland as a Cambridge International Level 3 Pre-U Certificate.

This document has 4 pages.



#### **Section A: Central Business Districts**

# Answer **both** questions: Question 1 and Question 2

- 1 Study Fig. 1.1, which shows part of the Central Business District (CBD) of a major UK city.
  - (a) Using Fig. 1.1, state **two** pieces of evidence which suggest that this is part of the CBD. [2] Study Fig. 1.2, which shows the location of shops and financial services in the CBD of Hexham, a market town in Northumberland, UK.
  - **(b)** Compare the distribution of shops with financial services in the CBD shown in Fig. 1.2. [4] Study Fig. 1.3, which shows rateable values along two transects through the CBD of Hexham.
  - (c) Using Fig. 1.3, to what extent are the rateable values along the two transects similar? [6]
  - (d) Assess the value of Figs. 1.1, 1.2 and 1.3 to those responsible for managing the CBDs of towns and cities. [8]

[Total: 20]

- 2 Study Fig. 2.1, which shows office buildings in Tokyo built between 1998 and 2018.
  - (a) Compare the location and height of the office buildings within the CBD with those outside the CBD shown in Fig. 2.1. [5]
  - **(b)** 'Some towns and cities have been more successful in the sustainable management of their CBDs than others.'

From your wider study of Central Business Districts, how far do you agree? [10]

[Total: 15]

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#### **Section B: Retail Patterns**

# Answer **both** questions: Question 3 and Question 4

- 3 Study Fig. 3.1, which shows land use percentages in three shopping malls in the centre of Dundee, Scotland.
  - (a) Giving evidence from Fig. 3.1, which land use has the greatest range of values? [2]
  - (b) Using Fig. 3.1, compare the land use percentages in each of the three shopping malls. [4]

Study Fig. 3.2, which shows the distribution of takeaway food outlets in the centre of Dundee, 2019.

- (c) Using Fig. 3.2, to what extent is there a clustering of the takeaway food outlets shown? [6]
- (d) Assess the strengths and limitations of Figs. 3.1 and 3.2 to those responsible for the sustainable management of retailing in town centres. [8]

[Total: 20]

- **4** Study Fig. 4.1, which shows the number of store openings and closures in England, Scotland and Wales, 2014–2019.
  - (a) 'The number of stores in England, Scotland and Wales is on the decline.'

How far does Fig. 4.1 support this statement?

[5]

(b) From your wider study of retail patterns, assess the challenges retailers must overcome to succeed. [10]

[Total: 15]

### **Section C: Environmental Degradation**

### Answer **both** questions: Question 5 and Question 6

- 5 Study Fig. 5.1, which shows blue crab populations in Chesapeake Bay, USA, 2007–2016. Blue crabs are a major species of both the marine ecosystem and the economy of Chesapeake Bay.
  - (a) Giving evidence from Fig. 5.1, which year had the greatest difference between spawning-age females and the total population of blue crabs? [2]
  - (b) Contrast the trends in spawning-age females and the total population of blue crabs from 2007 to 2014 shown in Fig. 5.1. [4]

Study Fig. 5.2, which shows nitrogen levels and targets by source in Chesapeake Bay, USA, in 2015 and 2017.

- (c) Using Fig. 5.2, how successful were the Chesapeake Bay authorities in meeting the target levels of nitrogen? [6]
- (d) Assess the value of Figs. 5.1 and 5.2 to those responsible for maintaining water quality in Chesapeake Bay. [8]

[Total: 20]

- Study Fig. 6.1, which shows the number of people per country living on land expected to be below sea level by 2100.
  - (a) 'People living in countries at lower levels of economic development are most at risk from rising sea levels.'

How far does Fig. 6.1 support this statement?

[5]

(b) From your wider study of environmental degradation, explain why it is often difficult to manage environmental degradation at the international scale. [10]

[Total: 15]

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