



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]

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]

- 6 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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