



Cambridge Pre-U

GEOGRAPHY

9768/04

Paper 4 Research Topic

May/June 2023

1 hour 30 minutes



You must answer on the answer booklet/paper.

You will need: Answer booklet/paper
Insert (enclosed)

INSTRUCTIONS

- Answer **three** questions in total:
Choose Section A, B or C according to your research topic.
Answer three questions from the same section.
For Section A, answer Question 1, Question 2 and **either** Question 3 **or** Question 4.
For Section B, answer Question 5, Question 6 and **either** Question 7 **or** Question 8.
For Section C, answer Question 9, Question 10 and **either** Question 11 **or** Question 12.
- 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 50.
- 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 **8** pages. Any blank pages are indicated.

Section A: Central Business Districts

Answer **three** questions:
Question 1, Question 2
and **either** Question 3 **or** Question 4

- 1 Study Fig. 1.1, which shows pedestrian counts at three locations within different zones of the Central Business District (CBD) of a major UK city for a 24-hour period in June 2019.
- (a) Giving evidence from Fig. 1.1, state the range of the pedestrian counts for the education and administration zone. [2]
- (b) Contrast the pedestrian counts for the zone of clubs, bars and restaurants with the zone of retail and offices between 12:00 hours and 00:00 hours shown in Fig. 1.1. [4]

Study Fig. 1.2, which shows the popularity of activities in selected areas of the CBD of the city at night-time.

- (c) Using Fig. 1.2, compare the popularity of the activities in the different areas of the CBD. [6]
- (d) Assess the value of Figs. 1.1 and 1.2 to those studying the night-time economy in the CBDs of towns and cities. [8]

[Total: 20]

- 2 (a) Study Figs. 2.1 and 2.2. Fig. 2.1 shows Northumberland Street in the CBD of Newcastle upon Tyne in 1979 and Fig. 2.2 shows the same view in 2016.

Using Figs. 2.1 and 2.2, suggest ways in which the changes shown between 1979 and 2016 have made Northumberland Street more sustainable. [5]

- (b) 'Economic factors have been the main causes of recent change in the CBDs of towns and cities.'

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

[Total: 15]

EITHER

- 3 With reference to your own study of Central Business Districts (CBDs), consider the extent to which you were successful in overcoming the problems you encountered during your collection of primary data.

Begin by stating the question or hypothesis that you investigated. [15]

OR

- 4 With reference to your own study of Central Business Districts (CBDs), to what extent were you able to explain all your findings?

Begin by stating the question or hypothesis that you investigated. [15]

Section B: Retail Patterns

Answer **three** questions:
Question 5, Question 6
and **either** Question 7 **or** Question 8

- 5 Study Fig. 5.1, which shows online shopping frequency, by age group, for May, June and July 2019 in Great Britain.
- (a) Giving evidence from Fig. 5.1, which age group showed the largest percentage difference between its lowest and highest online shopping frequency? [2]
- (b) Using Fig. 5.1, compare online shopping frequency of the 35–44 age group with that of the 65+ age group. [4]

Study Fig. 5.2, which shows online purchases, by type and age group, for May, June and July 2019 in Great Britain.

- (c) Using Fig. 5.2, compare the online purchases by the different age groups for the types of purchase shown. [6]
- (d) Evaluate the usefulness of Figs. 5.1 and 5.2 to a company considering expansion of its online shopping operations. [8]

[Total: 20]

- 6 (a) Study Fig. 6.1, which shows the change in distance to the nearest bank branch in Wales between 2008 and 2018.

‘Bank closures in Wales have caused changes in distance to the nearest bank branch. These changes have a distinct pattern.’

How far does Fig. 6.1 support this statement? [5]

- (b) ‘In the current continuously changing retail environment, only retailers who can adapt will survive.’

From your wider study of retail patterns, to what extent do you agree? [10]

[Total: 15]

EITHER

- 7 With reference to your own study of retail patterns, consider the extent to which you were successful in overcoming the problems you encountered during your collection of primary data.

Begin by stating the question or hypothesis that you investigated. [15]

OR

- 8 With reference to your own study of retail patterns, to what extent were you able to explain all your findings?

Begin by stating the question or hypothesis that you investigated. [15]

Section C: Environmental Degradation

Answer **three** questions:
Question 9, Question 10
and **either** Question 11 **or** Question 12

- 9 Study Fig. 9.1, which shows concentrations of microplastic particles in the water of the River Tame, UK, 2019.
- (a) Giving evidence from Fig. 9.1, state the range of microplastic particles per litre of water. [2]
- (b) Describe the variation in concentrations of microplastic particles from upstream to downstream shown in Fig. 9.1. [4]

Study Fig. 9.2, which shows concentrations of microplastic particles, by type, in channel bed sediments in the River Tame, UK, 2019.

- (c) Using Fig. 9.2, compare the changes in the concentration of fragments with the changes in the concentration of microbeads across the sample sites shown. [6]
- (d) Assess the value of Figs. 9.1 and 9.2 to those responsible for monitoring water pollution in the River Tame. [8]

[Total: 20]

- 10 (a) Study Fig. 10.1, which shows changes to the position of the ice front of the Larsen B Ice Shelf, Antarctica, from 1947 to 2002.

'The Larsen B Ice Shelf has been in steady retreat since 1947.'

How far does Fig. 10.1 support this statement? [5]

- (b) 'Human activities always have negative consequences for the environment.'

From your wider study of environmental degradation, to what extent do you agree? [10]

[Total: 15]

EITHER

- 11 With reference to your own study of environmental degradation, consider the extent to which you were successful in overcoming the problems you encountered during your collection of primary data.

Begin by stating the question or hypothesis that you investigated. [15]

OR

- 12 With reference to your own study of environmental degradation, to what extent were you able to explain all your findings?

Begin by stating the question or hypothesis that you investigated. [15]

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