



Catholic Junior College
JC2 Preliminary Examinations
Higher 2

GEOGRAPHY

9173/02
10 September 2024
3 hours

READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.

Write your class and name on all the work you hand in.
Write in dark blue or black pen on both sides of the paper.
You may use an HB pencil for any diagrams or graphs.
Do not use staples, paper clips, glue or correction fluid.
DO **NOT** WRITE ON ANY BARCODES.

Answer Question 1 in **Section A**.
Answer Question 2 in **Section B**.
Answer **one** question in **Section C**.

At the end of the examination, fasten all your work securely together.
The number of marks is given in brackets [] at the end of each question or part question.

Answer Questions 1 and 2 and
EITHER Question 3 **OR** Question 4

Section A

Cluster 4 Fieldwork

- 1** A group of 4 students from East Austin conducted fieldwork to investigate the impact of global warming on the liveability of the elderly in the neighbourhood. They focused on factors affecting the physical wellbeing of the elderly in East Austin, a neighbourhood in Austin, Texas. The research question was:

‘Has rising heat affected the physical wellbeing of elderly residents, aged 65 and above, living in East Austin?’

Before the start of their fieldwork, the students conducted secondary research by reading newspaper articles on the health risks associated with rising heat. Next, they met at 10am on a Saturday in June to conduct their fieldwork. At the start, the students worked in pairs and walked around the neighbourhood to take photographs of their observations on how rising heat might affect the physical wellbeing of the elderly. Next, each pair interviewed one elderly resident, at the sites they were at, about their experience coping with rising heat.

Based on their findings from the first day, the students went home and crafted a questionnaire to collect further data. They went back to the neighbourhood the following day at 10am to distribute the questionnaire to 20 elderly residents.

Resource 1 shows the map of the neighbourhood surveyed in East Austin, Texas. Resource 2 shows photographs taken by students, and selected quotes from the interviews. Resource 3 shows results of the questionnaire survey.

- (a)** Explain the suitability of the students’ research question. [4]
- (b)** With reference to Resources 1 and 2, suggest how students could reduce potential risks. [6]
- (c)** With reference to Resource 2, suggest how rising heat may affect the physical wellbeing of elderly residents in East Austin. [5]
- (d)** Explain three criteria students could use to select participants to take their questionnaire. [5]
- (e)** Explain why the sequence of the students’ data collection was useful in improving the accuracy and/or reliability of their investigation. [5]
- (f)** Suggest improvements to the representation of the data as shown in Resource 3. [5]
- (g)** Evaluate the students’ investigation of whether rising heat has affected the physical wellbeing of elderly residents in East Austin. [10]

Section B**Cluster 3 Sustainable Future and Climate Change**

- 2** Resources 4a and 4b show 2 projections of climate change impact on terrestrial ecosystems. Resource 5 shows the share of global emissions and climate technology investment by sector. Resource 6 shows survey responses from the private sector about who they felt should be responsible for funding climate resilience. Resource 7 shows a cartoon about what might happen in the future with climate change.
- (a)** Explain how changes in precipitation and temperature can lead to varied outcomes on populations. [4]
 - (b)** With reference to Resource 4, compare the projections of climate change impact on terrestrial ecosystems. [6]
 - (c)** Cite data from Resource 5 to describe the share of global emissions and climate technology investment. [5]
 - (d)** With reference to Resource 6, describe the survey responses from the private sector. [5]
 - (e)** Explain reasons for uncertainty over the present and future impacts of contemporary climate change. [6]
 - (f)** With reference to Resource 7, describe the challenges in implementing strategies to respond to contemporary climate change. [4]

Section C

Answer EITHER question 3 OR question 4.

- 3** 'Cities find it more challenging to be sustainable than liveable.'

Evaluate this statement.

[20]

- 4** 'Climate change has become the greatest challenge to sustainable urban development.'

Evaluate this statement.

[20]