



Catholic Junior College
JC2 Preliminary Examinations
Higher 2

GEOGRAPHY

Paper 2

9173/02

16 September 2025
3 hours

Additional Materials: Insert

READ THESE INSTRUCTIONS FIRST

An Answer Booklet will be provided with this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional answer paper, ask the invigilator for a continuation booklet.

Write your Centre number, index number and name on 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**.

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 four students conducted fieldwork to understand fluvial flood risk in Kuantan Town, Malaysia. They wanted to examine whether certain areas along the river experience different levels of flooding during the monsoon season.

The students selected two sites along public esplanades - Site A at Esplanade Kuantan and Site B at Esplanade Tanjung Api.

Their investigation focused on testing the hypothesis:

‘The Esplanade Kuantan area (Site A) has a higher flood risk than Esplanade Tanjung Api (Site B) due to differences in urban development along the river.’

For each site, they created a grid of twenty-five 20m x 20m squares covering an area extending 100m from the river's edge. Using Google Earth imagery, they classified each grid square as either:

- Built-up: Areas covered by buildings, roads, and paved surfaces
- Recreational space: Parks, sports facilities, and landscaped areas
- Natural surface: Undeveloped areas with trees, shrubs, or grass

During their field survey, the students used the public walkways at both sites to collect data. Using measuring tapes, they recorded the distance between the river's edge and the nearest buildings. They also noted the riverbank characteristics and measured the width of public walkways. All measurements were taken between 9am and 11am on a weekday to ensure consistency.

Resource 1 is a location map showing Sites A and B along the Kuantan River. Resource 2 shows photographs of Sites A and B. Resource 3 shows a sample grid classification. Resource 4 shows the data collected by the students at both sites.

- (a) With reference to Resources 2 and 3, explain the risks the students might face when collecting data at these sites. [5]
- (b) With reference to Resources 2 and 3, suggest how the students could minimise their impact at these public spaces during data collection. [5]
- (c) Explain how the timing of data collection could affect the results of this investigation. [5]
- (d) With reference to Resource 3, explain two problems the students might face when using this method to classify different types of land use. [4]
- (e) Suggest what other data about the sites the students should collect to better understand flood risk. [5]

- (f) Suggest three ways the students could improve the reliability of their data collection. [6]
- (g) Evaluate the effectiveness of the students' methodology in testing their hypothesis about flood risk at the two sites. [10]

Section B

Cluster 3 Sustainable Future and Climate Change

- 2 Resource 5 shows the gross domestic product (GDP) loss due to climate change in 2050. Resource 6 shows the sources of climate financing from 2013 to 2022. Resource 7 shows an infographic on climate change and cities. Resource 8 shows the ecological footprint of selected countries and cities.
- (a) Describe the GDP loss due to climate change in 2050 shown in Resource 5. [5]
- (b) Describe the changes in the sources of climate financing from 2013 to 2022 shown in Resource 6. [4]
- (c) Explain the role of human activities in accelerating and suppressing warming through feedback mechanisms. [5]
- (d) Cite data from Resource 7 to explain how climate change might impact vulnerable groups living in cities. [6]
- (e) With reference to Resource 8, explain the demand placed on the natural environment by urban areas. [5]
- (f) Explain how sustainable urban development can be monitored using relevant indicators. [5]

Section C

Answer **either** question 3 **or** question 4.

Cluster 3 Sustainable Future and Climate Change

- 3 'It is more difficult for cities to adapt to climate change than to manage slums.'
- Evaluate this statement. [20]
- 4 'Cities should prioritise sustainable urban development more than liveability.'
- Evaluate this statement. [20]

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