



National Junior College
SH2 Preliminary Examinations for General Certificate of Education
Advanced Level
Higher 1

GEOGRAPHY
Paper 1

8834/01

29 August 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.

Answer Question 1 in **Section A**.
Answer Question 2 and Question 3 in **Section B**.
Answer **two** questions in **Section C**.

The number of marks is given in brackets [] at the end of each question or part question.

Section A

Cluster 2: Fieldwork

- 1 A group of eight students conducted a geographical investigation into the effectiveness of local food waste reduction efforts in the Bishan neighbourhood of Singapore. These efforts include a 24-hour community fridge and a food recycling locker at Block 112 Bishan Street 12, and periodic food rescue and redistribution events at Bishan Community Club. Their hypothesis was:

“Residents who live nearer to community-based food waste initiatives are more likely to participate in them.”

To test this hypothesis, the students first visited Block 112 Bishan Street 12 and Bishan Community Club on a Saturday afternoon, where they interviewed four resident volunteers to understand how the residents engage with local food waste initiatives. On the following Saturday, they then administered a questionnaire to 40 residents at Bishan Bus Interchange.

Resource 1A is a map showing the locations of their investigation sites and food waste reduction efforts in the Bishan neighbourhood. Resource 1B shows photographs of food waste reduction efforts at Bishan Neighbourhood. Resource 2 shows selected interview responses. Resource 3 shows a survey form used by the students to collect responses. Resource 4 shows a summary of selected survey results.

- (a) Explain why this hypothesis is appropriate for investigating food waste reduction. [4]
- (b) Suggest ethical considerations the group should take into account when collecting data on-site. [3]
- (c) With reference to Resource 2, describe how the data collected from the interviews can be analysed. [5]
- (d) With reference to Resource 3, explain the strengths of the questionnaire used in this investigation. [4]
- (e) Using Resource 4, sketch a graph to present top reasons for participation in local food waste reduction efforts. [4]
- (f) Based on the students’ investigation, the students concluded that their hypothesis was proven wrong. With reference to all resources, evaluate the validity of the fieldwork. [10]

Section B

Cluster 1: Sustainable Future and Climate Change

- 2** Resource 5 shows the change in liveability scores from 2021 to 2022 in the European region, from a Locations Ratings Survey done by ECA International, a company that provides data, software and global mobility expertise to multinational companies. Resource 6 shows an infographic on Copenhagen, Denmark as a bike-friendly city. Resource 7 shows 7 of the 17 Sustainable Development Goals (SDGs) indexes by the OECD's localised framework which normalises the SDG indicators from 0 to 100 – where 100 is the suggested end value of an indicator to be achieved by 2030.
- (a)** Using Resource 5, describe the change in liveability scores from 2021 to 2022 in the European region. [4]
 - (b)** Explain the factors influencing the liveability of a place. [5]
 - (c)** Describe how strategies such as those implemented by Copenhagen shown in Resource 6 can help cities respond to contemporary climate change. [4]
 - (d)** Using Resource 7, compare the sustainability performance between Copenhagen, Denmark and Zurich, Switzerland. [4]
 - (e)** With reference to Resources 6 and 7, suggest possible challenges in progressing towards sustainable development. [5]
- 3** Resource 8A shows atmospheric carbon dioxide levels from 800,000 years ago based on ice core data to current levels in 2025. Resource 8B shows global ocean heat content trends from 1955 to 2020. Resource 9 shows cloud feedback mechanisms.
- (a)** Using Resource 8A, describe how atmospheric carbon dioxide levels have changed over the past 800,000 years. [4]
 - (b)** Explain how ice cores serve as proxy indicators of past climate variability. [4]
 - (c)** With reference to Resources 8A and 8B, explain the significance of human activities on the global carbon cycle. [5]
 - (d)** Explain the impact of contemporary climate change on aquatic ecosystems. [4]
 - (e)** With reference to Resource 9, explain how clouds in a warming climate illustrate uncertainty over the future impact of contemporary climate change. [5]

Section C

Cluster 1: Sustainable Future and Climate Change

Answer **two** questions.

- 4 “Community-led initiatives are more effective than government-led programmes in upgrading slums.”

Evaluate this statement. [13]

- 5 Evaluate the extent to which cities have successfully met the needs of women.

[13]

- 6 “The impact of climate change is not equal across places and populations.”

Evaluate this statement. [13]