

Name:		Class:	
Centre Number:		Index Number:	



DUNMAN HIGH SCHOOL PRELIMINARY EXAMINATION Year 6

HIGHER 2 GEOGRAPHY

9173/02

PAPER 2

Thursday

18 Sep 2025

3 hours

Additional materials: Insert

READ THESE INSTRUCTIONS FIRST

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

Answer **one** question in **Section C**

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

Section A

Cluster 4 Fieldwork

- 1 Sungei Bedok is a river in the eastern part of Singapore that flows through areas with different categories of land use. Ten junior college students were interested in comparing these land uses to investigate whether some were subject to higher flood risk than others.

Before the main fieldwork, the group conducted a recce trip (a short preliminary visit) on 6 August, during which they took photographs of the river and noted potential study sites across seven land uses. They also observed that most of Sungei Bedok had been canalised and concluded that the bankfull width and depth would remain uniform throughout the entire stretch.

The actual field investigation was carried out on 15 August. On that day, they took a single reading of bankfull width and depth, and administered a bi-polar survey to assess and compare flood risk across different land uses. For each land use category, they selected two sites to conduct the bi-polar survey.

Resource 1 shows a land use map of the vicinity of Sungei Bedok. Resource 2 shows a photo taken of the section of Sungei Bedok where they collected data on 15 August. Resource 3 shows a bi-polar survey crafted by the students. Resource 4 shows collated results of bipolar survey across all land uses.

- (a) Suggest a hypothesis and explain why it is appropriate for the investigation. [4]
- (b) Explain why it was important for students to go on a recce trip before the actual fieldwork. [5]
- (c) With reference to Resource 2, explain how features of this river could mitigate flood risk. [4]
- (d) With reference to Resource 2, describe how bankfull depth and width could be measured accurately. [5]
- (e) With reference to Resources 1 and 2, describe the risks faced by the students during data collection. [4]
- (f) Using Resource 4, sketch a graph to present the 'net score' for each land use. [4]
- (g) Suggest **two** types of additional data the students could collect to strengthen their investigation. [4]
- (h) Evaluate the students' investigation of flood risk across land uses along Sungei Bedok. [10]

Section B

Cluster 3 Sustainable Future and Climate Change

2 Resource 5 shows the classification of countries by the Human Development Index (HDI) of countries in 2022 and the sustainability indicators: world biocapacity in 1961 and 2022 and the Ecological Footprint of countries in 2022. Resources 6A, 6B and 6C show the performance of three indicators of the slum deprivation index: sanitation, waste disposal and dwellings of slum settlements in the Lagos metropolis, Nigeria. Resource 7 shows a typical slum in two settlements, Oko-Baba and Abule-Nla, in the Lagos metropolis. Resource 8 shows the mean annual global sea level change from 1992 to 2010. Resource 9 shows strategies that have been proposed to manage sea level rise in the low-lying South Pacific islands. The South Pacific islands are low-income countries and located in the southern Pacific Ocean.

- (a) Describe the relationship between HDI and sustainability of the countries shown in Resource 5. [4]
- (b) With reference to Resource 5, explain the possible challenges for the countries, with very high HDI and low HDI, in achieving sustainable urban development. [5]
- (c) With reference to Resources 6A, 6B and 6C, describe the performance of the slum settlements as shown by the indicators of the slum deprivation index. [4]
- (d) With reference to Resource 7, explain the issues of deprivation faced by the slum residents of Oko-Baba and Abule-Nla. [6]
- (e) Describe the distribution of mean annual global sea level change shown in Resource 8. [5]
- (f) With reference to Resource 9, explain the suitability of the proposed strategies to manage sea level rise in the South Pacific islands. [6]

Section C

Answer EITHER question 3 OR question 4.

- 3** 'The greatest challenge countries face in implementing strategies to respond to climate change is economic.'

Evaluate this statement. [20]

- 4** 'The main issue faced by women living in the city is related to their economic well-being.'

Evaluate this statement. [20]