



INNOVA JUNIOR COLLEGE  
JC2 PRELIMINARY EXAMINATIONS  
in preparation for General Certificate of Education Advanced Level  
**Higher 2**

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**GEOGRAPHY**

**9751/02**

Paper 2 Data Response Questions

**12 Sept 2018**

**3 hours**

Additional Materials:      Answer Paper  
   1 Insert  
   World outline map (optional)

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**READ THESE INSTRUCTIONS FIRST**

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

Candidates answer **all** questions.

You should make reference to appropriate examples studied in the field or the classroom, even where such examples are not specifically requested by the question.  
Diagrams and sketch maps should be drawn whenever they serve to illustrate an answer.  
The world outline map may be annotated and handed in with relevant answers.  
You are reminded of the need for good English and clear presentation in your answers.

At the end of the examination, fasten Question 1 and 2 with a cover and Question 3 and 4 with another cover page.  
The number of marks is given in brackets [ ] at the end of each question or part question.

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This document consists of **6** printed pages.



Innova Junior College

**[Turn over**

## Section A

### Theme 4: Geographical Investigation

- 1 A group of 20, 18 year old students from a junior college in Singapore wanted to examine the impact of industries on local communities. They have decided to study the impact of Nordcom 1 and Nordcom 2, which are two new light industrial areas located near a residential area in Woodlands.

The students wanted to gather information on the impact of the industrial area on the residents living nearby, especially in terms of noise, pollution and economic impact. They were given one week to complete their investigation in August in 2018.

The students then decided to divide themselves into four teams of 5. Two teams carried out their investigation in the newly completed residential areas, HDB Sun Natura and HDB Sun Breeze; and two other teams carried out their investigation in the residential areas further away. They have decided to carry out questionnaire surveys by approaching residents who were walking by the shops or at food establishments. The questions asked in the survey were:

- “To what extent has the setting up of Nordcom 1 and 2 made an impact to your life?”
- “Has the impact been largely positive or negative?”
- “Has the presence of Nordcom 1 and 2 brought more income to the area?”
- “Are you affected by the noise or pollution generated from Nordcom 1 or 2?”

The investigation was conducted from 12pm to 1pm each day. Each group interviewed 25 residents in total.

Resource 1 shows a map of the surrounding area of Nordcom 1 and 2.

Resource 2 shows the profile of Nordcom 1 and 2, explaining the type of activities found in the area.

Resource 3 shows the collated results from the questionnaire survey.

- (a) With reference to Resources 1 and 2, suggest a suitable hypothesis for the investigation and explain **two** reasons why the research is at a suitable scale. [3]
- (b) With reference to Resource 1 and the context provided, suggest and describe a suitable sampling method for the investigation. [3]
- (c) Your group concluded that the method of data collection through the questionnaire survey may not be completely reliable and accurate.  
Explain how the process of data collection could be improved. [7]
- (d) Suggest one limitation of the data representation method shown in Resource 3 and sketch an alternative data representation method to show the perception of the residents on the extent to which the setting up of Nordcom 1 and 2 have made an impact to their lives. [4]
- (e) Evaluate the usefulness of the data shown in all the resources in helping students understand the impact of industries on local communities. [8]

**Section B****Theme 1: Tropical Environments****Mass Movement in Sierra Leone**

- 2** Sierra Leone is located at 8° North of the African Continent. It is on the windward side of the Sugar Loaf Mountains. Freetown is the capital and largest city of Sierra Leone.
- Resource 4 shows the climate graph of Freetown, Sierra Leone.  
Resource 5 shows a satellite image of mass movements that have occurred across the African continent.  
Resource 6 shows the location of the mass movement that occurred in Sierra Leone.  
Resource 7 shows a photograph of the mudslide that occurred in Sierra Leone in 2017.
- (a) Using Resource 4, state the probable climate of Freetown, Sierra Leone and account for its characteristics. [5]
- (b) Using Resources 5 and 6 describe the relationship between topography and the different degrees of mass movements in the continent. [4]
- (c) Using Resource 7, with the use of a well-labeled diagram, state the type of mass movement that would have occurred and describe it. [4]
- (d) Using Resources 6 and 7, explain the reasons for the mass movement. [5]
- (e) Using all resources and your own knowledge, suggest reasons how the mass movement would have affected the natural and human environments. [7]

**Theme 2: Development, Economy and Environment****Coal Mining and Production in China**

- 3** China has one of the biggest coal resources in the world. It has 10% of its economy focusing on the primary, 44% on the secondary/manufacturing and 46% targeted at the tertiary industries, respectively.

Resource 8 shows the distribution of coal resources in the world.

Resource 9A shows the production and 9B shows the consumption of coal in the US and China.

Resource 10 shows the degradation caused by coal mining in China.

- (a) Using Resource 8, describe the distribution of coal resources in the world. [5]
- (b) Using Resources 9A and 9B and your own knowledge, suggest reasons why China's coal production has increased compared to that of the US. [7]
- (c) Using Resource 10, describe the impact of coal mining in China. [5]
- (d) Using all resources and your own knowledge, evaluate whether China is affected by the resource curse. [8]

**Theme 3: Sustainable Development****Climate Change in developing countries**

- 4** Resource 11 shows a map of the world's mismanaged waste.  
Resource 12 shows the global plastic production and use from 1950-2015.  
Resource 13 shows an article on Starbucks' plans to eliminate the use plastic straws globally by 2020.
- (a)** Describe the distribution of mismanaged plastic waste as shown in Resource 11. [3]
- (b)** Account for how the distribution of mismanaged plastic waste shown in Resource 11 may have changed after 2010. [3]
- (c)** Explain how Resource 12 shows the linear nature of production, consumption and disposal of plastic waste. [5]
- (d)** With reference to Resource 12 and 13, evaluate the effectiveness of eliminating use of single-use plastic straws at Starbucks stores in contributing to the global reduction of plastic waste. [5]
- (e)** With reference to all resources and your knowledge, discuss the role of various stakeholders in minimizing the impact of plastic waste. [9]