



SERANGOON JUNIOR COLLEGE
JC2 PRELIMINARY EXAMINATION 2018
Higher 2

GEOGRAPHY

9751/02

Paper 2 Data Response Questions

Wednesday
19 Sept 2018
3 hours

Additional materials: Writing Paper
1 Insert

READ THESE INSTRUCTIONS FIRST

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

Candidates answer **all** questions.

The Insert contains all the Resources referred to in the question paper.
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 all your work securely together.
The number of marks is given in brackets [] at the end of each question or part question.

Section A

Theme 4 : Geographical Investigations

- 1 The High Line is a 2.33km elevated linear park built on a disused section of the New York Central Railroad line.

The US\$150m urban regeneration project was widely hailed as a success, attracting nearly five million visitors annually and spurring new property developments and attractions along the High Line.

A group of ten students from the City University of New York decided to conduct an investigation to ascertain if the High Line met the needs of low-income residents in the Chelsea-Elliot public housing estate (location of the estate is indicated in Resource 1).

The students organised three focus group discussion sessions, conducted at a community centre near the Chelsea-Elliot public housing estate. Each focus group comprised 4-6 residents in the estate. Each 1-hour focus group discussion session was led by a student facilitator. During each session, the student facilitator would ask a series of open-ended questions to elicit responses on the regenerated High Line. The student facilitator also carried out a mental mapping exercise with the focus group.

Resource 1 shows a map of the High Line and selected attractions along the High Line, as well as the location of the Chelsea-Elliot public housing estate. Resource 2 shows the breakdown of participants by age and ethnicity in the respective focus groups. Resource 3 shows one sample of a mental map, with annotations gathered from the residents, showing their view of changes in the neighbourhood after the regenerated High Line.

- (a) Using Resource 1, identify the features that show attempts to regenerate the High Line. [4]
- (b) Suggest reasons why the students conducted focus group discussions and categorised the focus groups as shown in Resource 2. [5]
- (c) Explain how the group may overcome ethical concerns they face in their collection of primary data for this investigation. [4]
- (d) Outline the steps you will take to analyse and present the data collected from the focus group discussions. [5]
- (e) Using Resources 1 and 3, evaluate if the needs of local residents have been met and suggest how this evaluation can aid urban planning. [7]

Section B

Theme 1 : Tropical Environments

Erosion and sediment yield in the tropics

- 2** Resource 4 shows the sediment yield and drainage density in different tropical climates. Resource 5 shows a river form in a tropical region.
- (a) Describe the spatial variation in sediment yield across the tropical regions as shown in Resource 4a. [2]
 - (b) With reference to Resource 4a, describe and explain the relationship between annual sediment yield and effective precipitation. [5]
 - (c) Using Resources 4a and 4b, explain how mean annual precipitation and **one** other physical factor can affect drainage density. [6]
 - (d) Explain two ways by which the river, shown in Resource 5, obtains its sediment from outside the channel. [4]
 - (e) With the help of all Resources, assess the extent to which the calibre and quantity of sediment load are responsible for the channel form shown in Resource 5. [8]

Theme 2 : Development, Economy and Environment

Water Issues in Kenya

- 3** Resource 6 shows the main water catchments in Kenya. Resource 7 shows the regions of water deficit in Kenya. Resource 8 shows the multidimensional poverty index (MPI) in different regions of Kenya. Resource 9 shows the Sustainable Development Goals (SDG) 4, 5 and 6. Resource 10 shows the percentage of population with access to improved water sources in Kenya.
- (a) With reference to Resource 6, describe the physical environment where the main water catchments are located. [3]
 - (b) With the help of Resources 6 and 7, explain the reasons for regions experiencing water deficit. [6]
 - (c) Using Resources 6, 7 and 8, describe the relationships between the locations of water deficit and the level of multi-dimensional poverty index (MPI). [6]
 - (d) Using Resource 9 and your own knowledge, show how Kenya, by achieving the SDG 6 (Clean Water), is also able to achieve SDGs 4 and 5. [5]
 - (e) Describe and suggest reasons for the trend in the access to improved water sources as shown in Resource 10. [5]

Theme 3 : Sustainable Development

Energy in Myanmar

- 4 Myanmar is a developing country in South East Asia. To enhance energy security, the country has made significant investments in renewable energy.

Resource 11 shows Myanmar's electricity production by source from 2003 to 2012. Resource 12 illustrates the distribution of existing and planned hydropower plants in Myanmar. Resource 13 provides information on the Myitsone mega-dam project. In 2011, the Myanmar government ordered a halt to construction of the controversial \$3.6 billion mega dam following rare public opposition to the Chinese-backed hydropower project. Resource 14 features a wind power density map of Myanmar and proposed wind power sites.

- (a) Suggest **three** reasons for the trends in Myanmar's electricity production by hydropower from 2003-2012, as observed in Resource 11. [5]
- (b) Using Resource 12, compare the distribution of existing and planned hydropower plants in Myanmar. [4]
- (c) With reference to Resource 13 and your own knowledge, suggest possible reasons why local communities opposed the construction of the Myitsone dam. [8]
- (d) Citing evidence from all Resources and your own knowledge, recommend whether Myanmar should prioritise **either** further investment in hydropower **or** develop wind power capabilities. [8]

End of Paper