



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

GEOGRAPHY

9751/02

Paper 2 Data Response Questions

11th Sept 2017

3 hours

Additional Materials: Answer Paper
 World outline map (optional)

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 all your work securely together.
The number of marks is given in brackets [] at the end of each question or part question.

This document consists of **4** printed pages.



Innova Junior College

[Turn over

Section A

Theme 4 – Geographical Investigation

- 1** A group of 24 18 year-old students from Singapore, wanted to examine liveability in two urban neighbourhoods - Bishan and Woodlands. They have access to census information about the population density, the housing types and the median rent of the two neighbourhoods.

The students wanted to gather further information on the leisure facilities, public transport to gain a fuller picture of liveability. They were allocated three days for field investigation at the beginning, in the middle and at the end of November.

Resource 1 shows the median rent for flats in Bishan and Woodlands. Resource 2 shows the population density, housing types and amenities in Bishan and Woodlands neighbourhoods. Resource 3 show two photographs, one of Bishan's Junction 8 shopping centre and one of Woodlands' Causeway Point shopping centre. Resource 4 shows the data collated on the level of satisfaction with the public transport of the two neighbourhoods.

- (a)** With reference to Resource 1, outline why there might be contrasts in liveability between Bishan and Woodlands. [2]
- (b)** Suggest a suitable research question for the students' investigation with reference to Resource 2 and state three reasons why the research question is at a suitable scale. [4]
- (c)** Explain how Resources 1 and 2 can help the students to understand liveability in Bishan and Woodlands. [6]
- (d)** Suggest a plan for the students to investigate pedestrian count at the Bishan Junction 8 Shopping Centre and Woodlands Causeway Point, shown in Resource 3. In your plan, consider how some possible challenges of conducting the pedestrian count at the 2 locations can be overcome. [8]
- (e)** Sketch one diagram to represent the level of satisfaction with the public transport in the two neighbourhoods in Resource 4. Explain your choice of presentation. [5]

Section B

Theme 1 : Tropical Environments

Channel Morphology in India

- 2** Resource 5 shows an idealized model of change in channel variables along the Sutlej River in North India. Resource 6 shows the changes to the channel morphology of the Sutlej River. Resource 7 shows the load size in the same river. Resource 8 shows the width and depth measurement of 4 sites in the Sutlej River basin.
- (a) With reference to Resource 5, describe the channel morphology at the upstream end of the channel. [4]
 - (b) Using Resource 5, account for the relationship between gradient and mean velocity. [4]
 - (c) With the help of Resource 5 and your own knowledge, suggest reasons for the disparity, from the norm, between channel roughness and average velocity as the river flows from 12km to 18km as seen in Resource 6. [5]
 - (d) With reference to Resource 7, explain how load size affects the transportation processes. [5]
 - (e) With reference to Resource 8, explain which site shows greater efficiency of the river. [7]

Theme 2 : Development, Economy and Environment

Samsung's global production network

- 3** Resource 9 shows Samsung's global network. Resource 10 shows the global smartphone vendor shipments and market share in 2014 and 2015. Resource 11 shows Samsung's plan after the discontinuation of Galaxy Note 7.
- (a) With reference to Resource 9, describe the spatial distribution of Samsung's production bases. [2]
 - (b) Outline and suggest reasons for, the locations of Samsung's Research centres shown in Resource 9. [4]
 - (c) With reference to Resource 9 and your own knowledge, recommend whether Samsung should prioritise investment in Southeast Asia or China and justify your answer. [9]
 - (d) Apple is Samsung's biggest competitor. Using Resource 10 and your own knowledge, recommend how Apple can maintain its global market share and justify your answer. [5]
 - (e) Using evidence from Resource 11 and your own knowledge, explain why TNC's environmental impact on the host countries may be of concern. [5]

Theme 3 : Sustainable Development

Management of solid waste

- 4** Resource 12 shows how much Municipal Solid Waste (MSW) each urban-dweller produces per country (figures are for 2012, the latest year for which data is available). The World Bank defines MSW as including 'non-hazardous waste generated in households, commercial and business establishments, institutions, and non-hazardous industrial process wastes, agricultural wastes and sewage sludge. In practice, specific definitions vary across jurisdictions.'

Resource 13 shows US municipal waste (not recycled) between 1960-2010. Resource 14 is a photograph of the Smokey Mountain at Tondo, The Philippines.

- (a)** With reference to Resource 12, describe the global distribution of MSW. [4]
- (b)** Outline, and suggest reasons for, the generation of MSW shown in Resource 12. [5]
- (c)** Explain how Resource 13 illustrate the linear nature of urban metabolism. [4]
- (d)** Explain why some people in the low-income countries continue to live near/on the waste disposal sites as shown in Resource 14. [3]
- (e)** Using the resources 12 and 13 and your own knowledge, evaluate the effectiveness of two strategies to manage non-hazardous solid waste in developed countries. [9]

