



**HWA CHONG INSTITUTION**  
**JC2 Preliminary Examination**  
**Higher 1**

**CANDIDATE NAME**

**CT GROUP**

**CENTRE NUMBER**

**INDEX NUMBER**

---

**GEOGRAPHY**

**8813/01**

Additional Materials: Answer Paper  
1 Insert  
World outline map

**4 September 2017**  
**3 hours**

---

**READ THESE INSTRUCTIONS FIRST**

Write your name and CT class clearly on all 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, highlighters, glue or correction fluid.

Answer **four** questions in total.

**Section A**

Answer Question 1.

**Section B**

Answer Question 2.

**Section C**

Answer **two** questions, each from a different theme.

The Insert contains all the Resources referred to in the 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.

**Submit your answers in two separate sets:**

- 1. Question 1**
- 2. Questions 2 - 6**

**If you have not attempted any of the questions, you are to submit a piece of writing paper with your name, CG and question number written on it.**

## Section A

## Theme 3 : Geographical Investigation

- 1 A group of 20 18 year-old students wanted to examine the needs of the elderly living in Bukit Merah, a mature housing estate in Singapore. The group wanted to gain information on the social background of elderly individuals as well as the infrastructure and services available such as elderly care amenities, medical services, recreational facilities for elderly and general services (shops, banks, neighbourhood police post etc) to gain a fuller picture of the needs of the elderly.

The group decided to survey 20 households for their field investigation located in the same neighbourhood in Bukit Merah. The students visited the field site on three consecutive days in June to conduct a survey of the resident population aged 65 years and over in Bukit Merah and record observations of the services available in the neighbourhood.

The group also had access to general census data on the residents in Bukit Merah about their:

- (i) Living arrangement
- (ii) Mobility status
- (iii) Main source of financial support
- (iv) Highest qualification attained

Resource 1 shows a map of a part of Bukit Merah Estate. Resource 2 shows the Silver Zone traffic management programme. Resource 3 shows the mobility status and living arrangement of resident population aged 65 years and over in Bukit Merah.

- (a) Suggest a suitable research question for the group investigation and explain why the research question is clearly defined and at a suitable scale. [4]
- (b) With reference to the context provided, select and describe a sampling method to obtain a sample that is representative of the population. [4]
- (c) With reference to the context provided, explain one advantage and one disadvantage of the sampling method you have chosen in 1(b). [4]
- (d) With reference to Resources 1 and 2 and other information, explain how such data can help in understanding the needs of the elderly in Bukit Merah. [6]
- (e) Evaluate the usefulness of the census data and its graphic representation shown in Resource 3 in the analysis of the needs of the elderly. [7]

[Turn over

**Section B****Theme 1 : Climate Change and Flooding****Nigeria's tropical climates**

- 2 Resource 4 shows the location of Kano (12°N) and Lagos (6.5°N) in Nigeria. Resource 5 shows average monthly rainfall and mean monthly temperatures of Lagos and Kano. Resource 6 surface wind and pressure over West Africa during winter and at the peak of the summer monsoon. Resource 7 shows the position of the ITCZ over Africa during summer in the Northern Hemisphere.
- (a) With reference to Resource 5, compare the rainfall distribution of Lagos and Kano. [3]
  - (b) With reference to Resources 4, 5 and 6, explain the differences in rainfall distribution in Lagos and Kano. [4]
  - (c) Explain the nature of wind patterns shown in Resource 6. [6]
  - (d) With reference to Resource 7, account for the towering cumulonimbus (Cu) clouds over Africa in summer in the Northern Hemisphere. [4]
  - (e) With reference to Resources 6 and 7 and other information, evaluate the factors that influence the tropical monsoon (Am) climate. [8]

**[Turn over**

### Section C

Answer **two** questions from this section. **Either** Question 3 **or** Question 4 and **Either** Question 5 **or** Question 6.

#### Theme 1 : Climate Change and Flooding

- 3 (a) Explain the possible effects of climate change on human activity. [9]
- (b) To what extent can man respond effectively to the effects of climate change? Discuss with reference to specific examples. [16]
- 4 (a) With the aid of a diagram, describe and explain the characteristics of a flood hydrograph. [9]
- (b) To what extent does the level of economic development influence the impact of floods? Discuss with reference to specific examples. [16]

#### Theme 2 : Urban Change

- 5 (a) Resource 8 shows an example of an iconic building used in urban renewal.  
Explain the aim(s) of flagship projects used in urban renewal. [9]
- (b) With reference to specific examples, assess the effectiveness of various strategies to achieve liveability in cities. [16]
- 6 (a) Explain the difficulties of defining 'urban' and measuring liveability. [9]
- (b) 'The management of slums remains the most pressing area in achieving sustainable urban development.' Discuss with reference to specific examples. [16]

--- End of paper ---

---

*Acknowledgements:*

Question 1 Resource 1 @ [www.streetdirectory.com](http://www.streetdirectory.com)  
 Question 1 Resource 2 @ <http://ifonlaysiaingaporeans.blogspot.sg/>  
 Question 1 Resource 3 @ <https://www.singstat.gov.sg/>  
 Question 2 Resource 4 @ <http://www.srh.noaa.gov/jetstream/tropics/itcz.html>  
 Question 2 Resource 5 @ <https://en.climate-data.org/location/46648/>  
 Question 2 Resource 6 @ <https://www.hindawi.com/>  
 Question 2 Resource 7 @ <https://www.hindawi.com/>  
 Question 5 Resource 8 @ <https://www.e-architect.co.uk/bilbao/guggenheim-museum-bilbao>