



Catholic Junior College
JC2 Preliminary Examinations
Higher 1

GEOGRAPHY

8813/01

Paper 1

2 September 2019

3 Hours

READ THESE INSTRUCTIONS FIRST

Write your class and name 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, graphs or rough working.
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.
Diagram 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, you are to hand in **each question separately**.
The number of marks is given in brackets [] at the end of each question or part question.

Start each question on a fresh sheet of paper. You will hand in each question separately.

This document consists of 5 printed pages with 1 blank page.

[Turn over]

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Section A

Theme 3: Geographical Investigations

- 1 A group of five 18-year-old students from Singapore wanted to study the liveability of residents in the neighbourhood of Tiong Bahru, Singapore. The students conducted their investigation from 9am to 12pm on a Saturday morning.

The students conducted a landuse survey of the neighbourhood by walking around the neighbourhood and recording the different landuse functions. They presented their findings in a landuse map.

They also conducted a bi-polar survey to assess the perception of the residents with regards to the facilities that were currently available. They stood in front of the Tiong Bahru Market which had high human traffic to distribute the questionnaire survey to the first 20 people who were willing to take the survey.

Resource 1 shows the landuse map of the Tiong Bahru neighbourhood. Resource 2 shows the bi-polar survey questions. Resource 3 shows selected results of the survey.

- (a) Suggest a research question for the investigation and explain why it is capable of research. [3]
- (b) Explain the limitations of the data representation methods shown in Resource 1 and 3, and suggest how it can be improved. [4]
- (c) The group concluded that the data collected for their questionnaire survey may not have been completely reliable and/or accurate. [6]

With reference to the preamble and Resource 2, explain why this is so and suggest how the data collection process of the students' geographical investigation could be improved.

- (d) Explain a potential risk in carrying out the research that you may encounter and propose how you would minimise it. [4]
- (e) Discuss the extent to which the findings in the investigation is a good measure of the liveability of residents in the Tiong Bahru neighbourhood. [8]

Section B

Theme 2: Urban Change

Atmospheric and Hydrological Processes in the Atacama Desert

- 2** The Atacama Desert has an average of less than 15mm of rain each year. Resource 4 shows the wind patterns and moisture available for precipitation in March, 2015, over South America. Resource 5 shows a satellite image of the Atacama Desert in South America. Resource 6 shows sea surface temperature anomalies along the Eastern Pacific Ocean during 20-24 March, 2015. Resource 7 shows the impacts of floods in the Atacama Desert as reported in 27 March, 2015.
- (a)** Describe variations in the total precipitable water over land in South America as shown in Resource 4. [3]
- (b)** With reference to Resource 4 and 5, account for the amount of total precipitable water over the Atacama Desert [4]
- (c)** With reference to Resource 4 and 6, and your own knowledge, explain why there may be an increase in temperature and rainfall over the Atacama Desert in March, 2015. [6]
- (d)** Suggest how the accumulated rainfall amount shown in Resource 7 may affect the flows and storages in the Atacama Desert. [5]
- (e)** With reference to some resources and your own knowledge, explain the factors that contributed to the impacts of floods in the Atacama Desert as shown in Resource 7. [7]

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 anthropogenic activities in Less Developed Countries that have contributed to global warming. [9]
- (b) To what extent is alternative energy the best response to contemporary climate change? [16]
- 4(a) Explain the flood management strategies that countries with limited financial resources can use. [9]
- (b) "Global warming can bring about serious negative impacts to all countries." To what extent do you agree with this statement? [16]

Theme 2: Urban Change

- 5(a) Explain the waste management problems faced by countries with low levels of development. [9]
- (b) 'Lack of funding poses the greatest challenge to achieving urban liveability.' With reference to some strategies, to what extent do you agree with the statement? [16]
- 6(a) Explain the reasons for **either** fear **or** crowding in different parts of the city [9]
- (b) Discuss the effectiveness of strategies used to manage **either** fear **or** crowding in cities. [16]

**** END OF PAPER ****