

JC 2 H2 Geography

9751/02

Paper 2 19 September 2018

3 Hours

Additional Materials: Answer Book

Insert

World outline map

READ THESE INSTRUCTIONS FIRST

Write your name and Civics Group clearly on **all** your answer scripts. 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, glue or correction fluid.

Candidates answer all questions.

The Insert contains all the Resources referred to in the questions.

You should make a reference to appropriate examples studied in the field or the classroom, even where the examples are not specifically requested by the question.

Sketch maps and diagrams should be drawn wherever they serve to illustrate an answer.

You are reminded of the need for good English and clear presentation in your answers.

Start each question on a fresh sheet of paper.

1. At the end of the examination, fasten this **cover sheet** and all your work in **chronological order** together securely for submission.

The number of marks is given in the brackets [] at the end of eac	ch question or part question.
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	This document consists of 5 printed pages.	
Name:		
Class:		
Index number:		

Qn no.	Marks	Qn no.	Marks
1		3	
2		4	
Total			

Section A Theme 4 – Geographical Investigation

A class of 22 Geography students were tasked to undertake an investigation to ascertain the impact of industries on local communities. They were given 2 weeks during June to conduct the investigation.

During the planning phase of the geographical investigation, the team identified the industrial estates by first looking at the Jurong Town Corporations (JTC) industrial map of Singapore. Due to time and manpower constraints, the team chose to focus on investigating the environmental impacts of industries on local communities and identified two industries of different nature to conduct their study:

- 1. Pasir Ris Wafer Fabrication Park, which is characterised by high technology-based light industries
- 2. Eunos Industrial Estate, which is characterised by medium-to-heavy industries.

Both industrial estates are located at the Eastern part of Singapore

To measure the air quality, an Air Quality Meter was used. They selected sites within 500m of each industry and recorded the readings for particulate matter (PM) concentration in the air, temperature and humidity levels. The readings were taken daily at 9am and 6pm and the results were recorded.

Resource 1 shows the map used by the students for the 2 sites of investigation. Resource 2 shows the Air Quality Meter and the features.

Resource 3 shows a table the students created to record the readings.

- (a) With reference to Resource 1 and Resource 3, suggest a hypothesis for the investigation and explain why it is suitable. [3]
- (b) Explain the considerations the students should take note of when selecting the sites for measuring air quality. [5]
- (c) State **two** limitations of the data collection method and explain how the data collection process can be improved. [6]
- (d) Suggest how the data recorded can be represented. [2]
- (e) Evaluate the usefulness of the investigation in understanding impacts of industries on local communities. [9]

Section B

Theme 1: Tropical Environment Climate Variability and Channel Morphology in Asia Pacific

2 Resource 4 shows the average sea surface temperature anomalies between June and July 2010.

Resource 5 shows the climate data of Dhaka, Bangladesh, under normal conditions.

Resource 6 shows the Jamuna River and a segment of the features of the river.

- (a) Using Resource 4, describe the temperature anomalies in the Pacific Ocean. [4]
- (b) Using Resources 4, 5 and 6, suggest how temperatures anomalies can result [4] in changes in rainfall pattern in Dhaka, Bangladesh.
- (c) Describe the morphological features of the segment of Jamuna river shown in [4] Resource 6.
- (d) Using Resources 4 and 6, explain how the temperature anomalies may result in changes in channel processes and morphological features of the Jamuna [6] River.
- (e) Using Resource 4 and your own knowledge, explain how impacts of the [7]

temperature anomalies may differ between Australia and Peru.

Theme 2: Development, Economy and Environment Global Economic Development

3 Resource 7 shows the pattern of global trade flows in 2001. Resource 8 shows the global inequalities in R&D expenditure in 2002. (a) Using Resource 7, compare the pattern of global trade flows between Africa and Western Europe in 2001. [4] **(b)** Suggest reasons for pattern of trade flows described in (a). [6] (c) Describe the global inequalities in R&D expenditure in 2002 as shown in Resource 8. [3] (d) Explain how Resources 7 and 8 may reflect a core-periphery relationship in [5] the global economy. (e) Using Resources 7 and 8, suggest what further information you would require for a fuller understanding of the nature of current global economic [7] development.

Theme 3: Sustainable Development Squatter settlements and Re-imaging in Peru and Singapore

- Resource 9 shows the distribution of squatter settlements in Lima, Peru. Resource 10a and 10b shows Clarke Quay, Singapore in the past and present respectively. Resource 11 shows a commentary on Clarke Quay, Singapore.
 (a) Using Resource 9, compare the location and extent of squatter settlements in the districts named Metropolitan Lima and Cono Sur.
 (b) Squatter settlements can be seen as 'slums of hope'. With reference to Resource 9, explain why living in a squatter settlement may be a positive experience for many people.
 (c) Identify the features in Resource 10 which show that urban reimaging has taken place.
 (d) Using Resource 9, 10 and 11, suggest reasons for urban re-imaging in cities.
 [4]
 - **(e)** Imagine you are a planning official from Metropolitan Lima who is looking into reimaging of Metropolitan Lima.
 - With reference to Resource 9, 10 and 11 and your own knowledge, critically evaluate the applicability of the reimaging strategies undertaken at Clarke Quay to Metropolitan Lima.