Name:		Index Number:	Class:
* SINGAPORE	DUNMAN HIC PRELIMINAR Year 6	GH SCHOOL Y EXAMINATIO	NS
HIGHER 2 GEC	OGRAPHY		9751/02

Tuesday19 September 20173 hours

Additional materials: 1 Insert World outline map

Paper 2 Data Response Questions

# READ THESE INSTRUCTIONS FIRST

Write your name and 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 a HB pencil for any diagrams or graphs. Do not use staples, paper clips, highlighters, glue or correction fluid.

Candidates answer **all** questions.

The Insert contains all Resources referred to in the questions. You should make reference to appropriate examples studied in the field or in the classroom, even when such examples and not specifically requested by the question. Diagrams and sketch maps should be drawn wherever they serve to illustrate an answer. The outline world 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 the brackets [ ] at the end of each question or part question.

This document consists of **5** printed pages

[Turn over

9751/2017/02/Prelim Examinations

#### Section A

#### Theme 4: Geographical Investigation

1 A group of 18 18 year-old students in Singapore wanted to conduct a study of interfirm linkages of Singapore owned TNCs and Foreign-owned TNCs in the local electronics industry to ascertain the extent of inter-firm linkages between these TNCs and their domestic suppliers.

The students collected data from the Economic Development Board which highlighted that there were 1580 TNCs in the electronics and electronics-related industry in operation in Singapore for the year 2010. Based on this data, the students randomly selected 10 TNCs; 5 of the randomly selected TNCs were Singapore owned and the other 5 were foreign owned. The students then contacted these TNCs on the possibility of gaining access to information regarding the extent of the inter-firm linkages between the TNCs and the domestic suppliers as well as how intensive these inter-firm linkages are. However, only 3 of the 10 TNCs, all Singapore owned TNCs, provided information and granted interviews to the students.

The students divided themselves into 6 groups of 3 interviewers. Each group thereafter interviewed either 1 or 2 TNCs. The students then started contacting the TNCs from the list provided by the Economic Development Board, starting in alphabetical order until they were able to interview and collect information from the 10 TNCs. The interview and surveys were carried out from February to August 2017 during working hours. Students were able to personally conduct face to face interview for 7 of the 10 TNCs and the remaining 3 interviews were conducted by phone and email.

At the selected TNCs, the following investigation was carried out:

- The students interviewed 2 members of the staff: the human resource manager and the public relations manager.
- The interviewees were asked by a close survey the following questions,
  - o "How intensive is your TNC's link with the domestic suppliers?"
  - o "Why did you choose to use domestic suppliers?" and
  - "What is the most important reason why you choose to use domestic suppliers?"
- The students requested for the number of components that were required to assemble a "finished good" and how many of these components were provided by domestic suppliers
- The students requested for a breakdown of how much of the TNCs' #''finished good'' come from domestic suppliers in terms of percentage of the total product

#'Finished Good' refers to the process where a good purchased as a "raw material" goes into the manufacture of a product. A good only partially completed during the manufacturing process is called "work in process". When the good is completed as to manufacturing but not yet sold or distributed to the end-user, it is called a "finished good".

**Resource 1** shows the breakdown of how much of the TNCs' "finished good" come from domestic suppliers in terms of percentage of the total product breakdown in percentages. **Resource 2** shows the number of components that were required to assemble a "finished good" and how many of these components were provided by domestic suppliers in percentages. **Resource 3** shows the collated results from the face to face interview with the managerial staff from the 10 TNCs. **Resource 4** shows the characteristics of the selected Singapore Owned TNCs and Foreign Owned TNCs.

- (a) With reference to Resources 1 and 2, suggest a suitable hypothesis for the group's investigation. [1]
- (b) Explain how the group may overcome ethical concerns they may face in their collection of primary data for this investigation. [4]
- (c) Your group concluded that the data collected may not be completely reliable and accurate.

Explain how the process of data collection could be improved. [6]

- (d) Draw 1 histogram to represent data from Question 1 of Resource 3 and 1 pie chart to represent data from Question 2 of Resource 3. [5]
- (e) With reference to Resources 1, 2, 3 and 4 and of your own understanding, evaluate the usefulness of the data in helping to ascertain the extent of inter-firm linkages between TNCs and their domestic suppliers. [9]

## **Section B**

#### **Theme 1: Tropical Environments**

#### Geomorphic and hydrologic processes in the tropics

- 2 Resource 5 shows the locations of the Narmada River (India) and the Chad Basin (Africa). Resources 6A and 6B show respectively the occurrence of a typical landslide and a generalized study of the role of rainfall in triggering landslides within the Narmada drainage basin during the wet monsoon season. A large part of the sediment load in the Narmada River is derived from slope processes within the basin. Resource 7 shows the typical wet monsoon flow regime of the Narmada River and the likely changes in the channel morphology at location X of the river course shown in Resource 5. Resource 8 shows the dust deposition at five collection points in the Chad Basin during a harmattan season. Resource 9 shows a yardang landscape in northern Chad.
  - (a) With reference to the characteristics of the slope materials shown in Resource 6A, suggest the likely nature of the weathering processes operating in this locality.
  - (b) With reference to Resource 6B only, explain how the changes in slope failure occurrence and sediment load peak can be explained by the rainfall characteristics during the wet monsoon season.
  - (c) Apart from rainfall characteristics, suggest three other environmental factors that can facilitate slope failure within the Narmada drainage basin. [3]
  - (d) With reference to Resources 6 and 7, explain how changes in discharge and sediment load during the wet monsoon season can affect the channel morphology at location X of the Narmada River shown in Resource 5.
  - (e) With reference to Resources 8 and 9 and your own knowledge, explain how the environments shown have been influenced by wind action and the surface characteristics of these environments.

[4]

## Theme 2: Development, Economy and Environment

#### Toyota Vehicle Production

3	Resource 10 shows the spatial structure of Toyota's vehicle production in exports in 2007 and sales from 2000 to 2009. Resource 11 is a factfile about Br	
(a	) With reference to Resource 10, describe the spatial distribution of Toyota's vehicle assembly sites.	[4]
(b	) Outline, and suggest reasons for, the location of Toyota's R&D centres shown in Resource 10.	[5]
(c	) Explain the percentage change in vehicle sales in Asia shown in Resource 10.	[3]
(d	) Using evidences from Resource 11, suggest <b>two</b> reasons why Toyota's vehicle production in Brazil continued to operate in 2014.	[4]
(e)	Using Resource 10 and your own knowledge, recommend whether Toyota should prioritise investment in Africa or Asia and justify your decision.	[9]

# Theme 3: Sustainable Development

## **Urban Reimaging in Cities**

- 4 Resource 12 shows the Swansea Dock area in the United Kingdom before and after urban renewal. Resource 13 shows landuse in Shanghai, China. Resource 14 shows the possible development proposals for the site in the foreground of the photograph shown in Resource 13.
  - (a) Compare landuse patterns in Resource 12 before and after urban renewal in the Swansea Dock area.
    [5]
  - (b) With reference to Resource 12, suggest a brief explanation for changes to the transport system in the Swansea Dock area. [3]
  - (c) Suggest how the land use seen in Resource 13 could indicate the urban processes taking place in Shanghai. [4]
  - (d) With reference to Resources 12 and 13 and your own knowledge, explain how changes in the landuse of the sites shown can improve the quality of the urban living space.

[6]

[7]

(e) Imagine you are the chief planning officer for Shanghai with overall responsibility for planning decisions in the area shown in Resource 13. Using Resources 13 and 14, outline your considerations in reaching a decision about which proposal to approve.