



#### MINISTRY OF EDUCATION, SINGAPORE

in collaboration with

## CAMBRIDGE ASSESSMENT INTERNATIONAL EDUCATION

General Certificate of Education Normal (Academic) Level

CANDIDATE NAME							
CENTRE NUMBER	S			INDEX NUMB			

**HUMANITIES** 

2125/02

Paper 2 Geography SPECIMEN PAPER

1 hour 45 minutes

For examination from 2024

Candidates answer on the Question Paper.

Additional Materials: Insert

#### **READ THESE INSTRUCTIONS FIRST**

Write your centre number, index number and name in the spaces at the top of this page.

Write in dark blue or black pen.

You may use an HB pencil for any diagrams, graphs or rough working.

Do not use staples, paper clips, glue or correction fluid.

DO NOT WRITE ON ANY BARCODES.

Section A: Answer Question 1.

Section B: Answer either Question 2 or Question 3.

The number of marks is given in brackets [ ] at the end of each question or part question.

This document consists of 24 printed pages and 1 insert.





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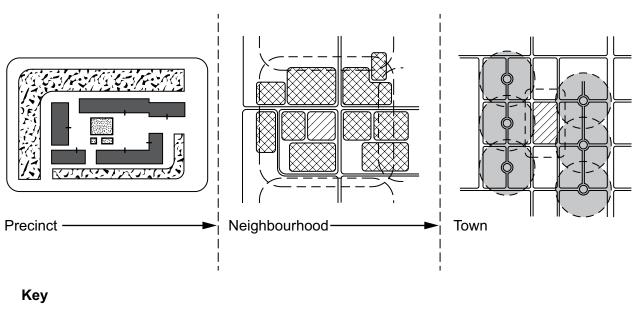
## **Section A**

This question is **compulsory**.

## **CLUSTER 1: GEOGRAPHY IN EVERYDAY LIFE**

1 (a) (i) Study Fig. 1.1, which shows a spatial hierarchy found in Singapore.

## A spatial hierarchy found in Singapore



_		
	Residential (400 to 800 units)	Neighbourhood
	Car park	Town centre
	Sports facilities	Precinct

Fig. 1.1

Describe the characteristics of each level of the filerarchy shown in Fig. 1.	l.
	[3]

(ii) Table 1.1 is a list of some facilities available to citizens living in a new town in Singapore.

Table 1.1 Facilities available to citizens living in a new town

facility	characteristics
community garden	local people can grow their own vegetables here
integrated transport hub	a transport terminal with bus, railway and MRT stations
park	a large green space with trees, a playground and a fitness area
three-generation play and fitness area	exercise equipment for the elderly, sport courts for families and open playgrounds for children

should only be u	used once.
town	
neighbourhood	
precinct	
	[2]

Identify a facility from Table 1.1 for each of the spatial hierarchy listed below. Each facility

Study Fig. 1.2, which shows world urban population from 1990 to 2020 and Fig. 1.3, which shows the percentage of respondents who shopped online at least once a month.

## World urban population

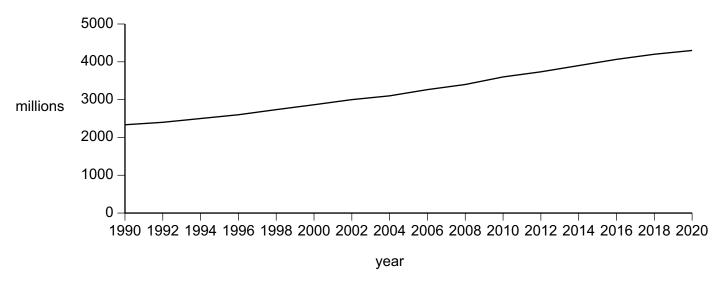


Fig. 1.2

## % of respondents who shopped online at least once a month

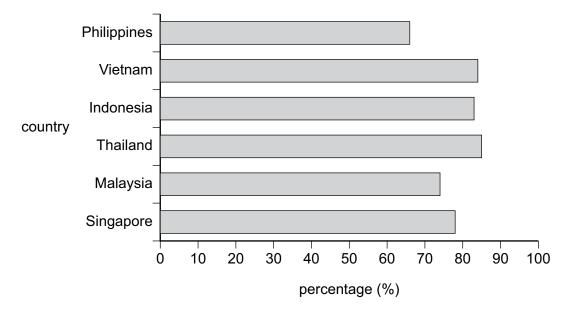


Fig. 1.3

(iii)	With reference to Fig. 1.2 and Fig. 1.3, suggest why the number of services in a town centre may change.
	[3]
	ly Fig. 1.4 and Fig. 1.5 (Insert), which show neighbourhoods in Singapore which were at different times.
Usin	g Fig. 1.4 and Fig. 1.5, describe <b>three</b> differences between the two neighbourhoods.
	[3]
	Stud built Usin

(c) A class of 16 students wanted to compare the levels of satisfaction and frequency of use made by the residents of the two neighbourhoods shown in Fig. 1.4 and Fig. 1.5 (Insert). They decided to conduct a questionnaire survey on a Saturday. They divided into four groups for the survey, with two groups going to each neighbourhood; one group in the morning and one group in the afternoon. Each group stood in the centre of each neighbourhood and surveyed the first 100 people they saw.

The results of 2 questions in the questionnaire are shown in Tables 1.2 and 1.3.

(i)	What type of scale is used in this questionnaire?
	[1]

(ii) Complete the empty cell in Table 1.2 by calculating the mean for 'neither satisfied nor dissatisfied' for the neighbourhood in Fig. 1.5. [1]

Table 1.2

## **Results for Question 1**

Question 1: Please indicate your level of satisfaction with the following facilities in this neighbourhood:

Neighbourhood in Fig. 1.4

Facilities	Level of satisfaction						
	very dissatisfied	somewhat dissatisfied	neither satisfied nor dissatisfied	somewhat satisfied	very satisfied		
eating places	1	9	35	33	22		
education facilities	0	3	27	38	32		
healthcare facilities	3	8	31	36	22		
recreation and leisure	5	12	43	21	19		
retail shops	2	14	28	30	26		
mean	2.2	9.2	32.8	31.6	24.2		

Neighbourhood in Fig. 1.5

Facilities	Level of satisfaction					
	very dissatisfied	somewhat dissatisfied	neither satisfied nor dissatisfied	somewhat satisfied	very satisfied	
eating places	1	3	15	47	34	
education facilities	0	2	17	40	41	
healthcare facilities	1	6	31	34	28	
recreation and leisure	2	10	19	37	32	
retail shops	2	9	21	38	30	
mean	1.2	6.0		39.2	33.0	

Table 1.3

## **Results for Question 2**

Question 2: How often do you use this neighbourhood for the following activities:

Neighbourhood in Fig. 1.4

Activity	Frequency of use						
	never	rarely	sometimes	often	always		
visit the supermarket	0	0	5	8	87		
go to the cinema	2	6	21	29	42		
visit the doctor	0	0	2	7	91		
playing sport	7	7	18	33	35		
mean	2.3	3.3	11.5	19.3	63.8		

Neighbourhood in Fig. 1.5

Activity		F	requency of us	e	
	never	rarely	sometimes	often	always
visit the supermarket	0	0	3	5	92
go to the cinema	10	14	28	27	21
visit the doctor	0	0	5	5	90
playing sport	4	4	8	30	54
mean	3.5	4.0	11.0	16.8	64.3

(iii)	Using Tables 1.2 and 1.3, compare the levels of satisfaction and frequency of use made by the residents between the two neighbourhoods.							
	Level of satisfaction							
	Frequency of use							
		 [4]						
(iv)	Evaluate the reliability of the data collection method used in this investigation.							
		[4]						

(d)	Study Fig. 1.6 (Insert), an image of part of a plan for a new town in Singapore.
	With reference to Fig. 1.6, describe the ways in which the plan supports environmental and social sustainability of an urban neighbourhood.
	Environmental sustainability
	Social sustainability
	[4]

[Total: 25 marks]

## Section B

Answer either Question 2 or Question 3.

## **CLUSTER 2: CLIMATE**

2	(a)	Stu	dy Fig. 2.1 (Insert), which shows the water cycle.	
		(i)	Identify the processes X and Y shown in Fig. 2.1.	
			X	
			Υ	 [2
		(ii)	Describe process Z shown in Fig. 2.1.	

**(b)** Study Fig. 2.2, which shows a climate graph.

## Climate graph

total annual rainfall 1909 mm

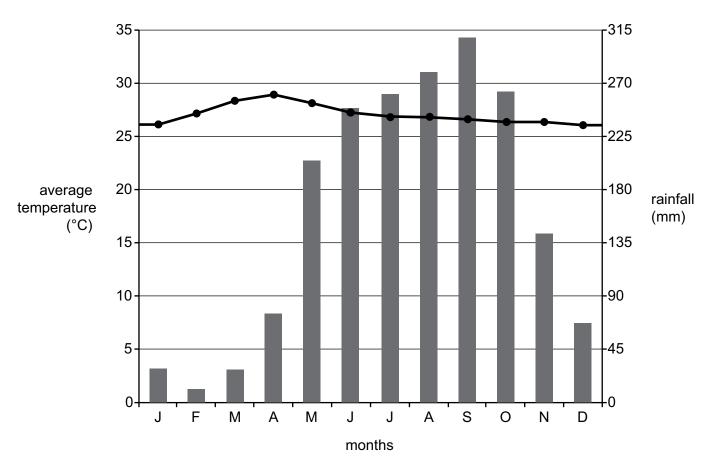


Fig. 2.2

(1)	Identify the type of climate shown in Fig. 2.2.	
	type of climate	1]
(ii)	Describe the rainfall shown in Fig. 2.2.	

**(c)** Study Fig. 2.3, which shows the variation in solar activity and global surface temperature changes from 1880 to 2020.

## Variation in solar activity and global surface temperature changes from 1880 to 2020



# Keyglobal surface temperaturesolar activity

Fig. 2.3

(i)	Using Fig. 2.3, compare the relationship between solar activity and global surface temperature changes before and after the 1950s.
	[1
(ii)	Explain a natural factor that influences climate variability.
	[2

(d)	(i)	Study Fig. 2.4 (Insert), which shows the possible extension in the distribution of malaria by 2050 as a result of climate change.
		Describe the possible changes in distribution of malaria as shown in Fig. 2.4.
		[2]
(	(ii)	Study Fig. 2.5 (Insert), a cartoon showing the impacts of climate change.
		With reference to Fig. 2.5, explain why people respond differently to impacts of climate change.
		[2]

**(e)** Study Fig. 2.6, which shows perception of global warming among four different groups of Americans.

## Perception of global warming among four different groups of Americans

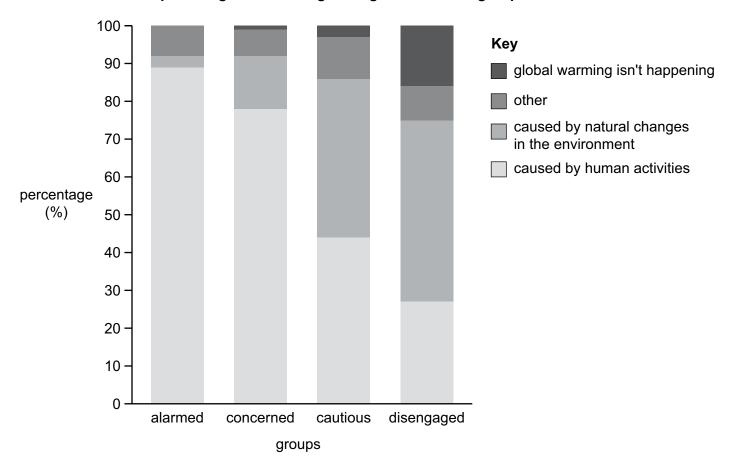


Fig. 2.6

Americ	ans.					warming		
								[3]
		 	 	 	 		 	 [J]

Mitigation strategies adopted by countries to build climatic resilience can only be partially effective.
To what extent do you agree with this statement? Explain your answer.
[6]

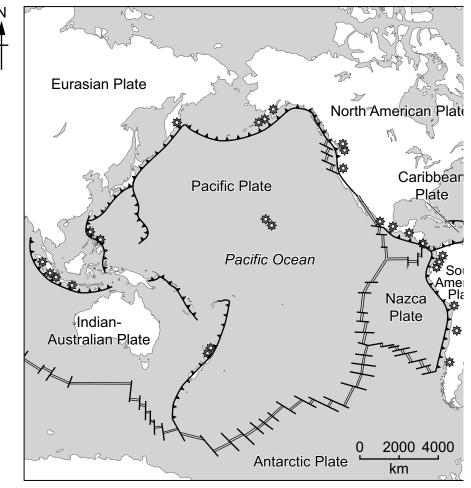
[Total: 25 marks]

(f)

## **CLUSTER 3: TECTONICS**

**3 (a)** Study Fig. 3.1, which shows a map of the tectonic plates and major active volcanoes in the Pacific Ocean.

## Tectonic plates and major active volcanoes in the Pacific Ocean



#### Key

- divergent plate boundaries
- convergent plate boundaries
- major active volcanoes

Fig. 3.1

(i)	Using Fig. 3.1, describe the distribution of volcanoes in the Pacific Ocean.
	[3]

I)	Explain how volcanoes are formed at convergent plate boundaries.	
		Γ4

**(b)** Study Fig. 3.2, a diagram of an oceanic-oceanic divergent plate boundary showing different magnetic polarities over time.

## An oceanic-oceanic divergent plate boundary showing different magnetic polarities over time

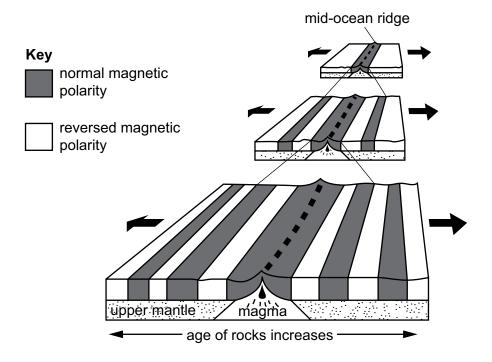


Fig. 3.2

With theory	to Fig.	3.2, expla	ain how	the diffe	erent pola	rities help	support	plate	tectonic
	 						• • • • • • • • • • • • • • • • • • • •		
	 								[31

(C)	Stu	dy Fig. 3.3 (Insert), which shows an eruption from Mount Sinabung, Indonesia.	
	(i)	Identify the type of volcano shown in Fig. 3.3.	
	(ii)	With reference to Fig. 3.3, describe the characteristics of Mount Sinabung's eruption.	
			[2]

(d) Study Fig. 3.4, which shows the magnitude and depth of earthquakes in the USA from 2010 to 2019.

## The magnitude and depth of earthquakes in the USA from 2010 to 2019

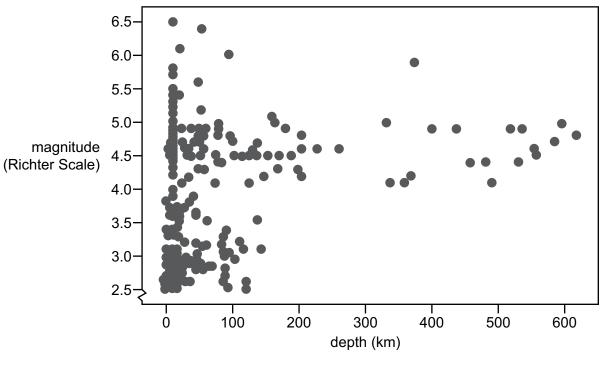


Fig. 3.4

Describe the magnitude of earthquakes shown in Fig. 3.4.
[3
Explain how a seismometer records the magnitude of earthquakes.

(e)

'Building community resilience to earthquakes can only be partially effective.'
To what extent do you agree with this statement? Explain your answer.
[6

[Total: 25 marks]

(f)

## **Additional page**


## **Additional page**

Copyright Acknowledgeme	ents:
Question 1 Fig. 1.1	© Study on land use characteristics of rail transit TOD sites in new towns—taking Singapore as an example; Shaofei Niu, Ang
Overtion 1 Fig. 1.4	Hu, Zhongwei Shen, S.s. Y Lau, Xiaoyu Gan; Creatvie Commons Attibution 4.0 International; https://creativecommons.org/licenses/by/4.0/
Question 1 Fig. 1.4	© HDB Estate at Khatib, Singapore; mailer_diablo; Creative Commons Attribution-Share Alike 3.0; https://creativecommons.org/licenses/by-sa/3.0
Question 1 Fig. 1.5	© Ref: GYR0WM; YAY Media AS / Alamy Stock Photo; residential estate; www.alamy.com
Question 1 Fig. 1.6 Question 2 Fig. 2.2	© https://sublimemagazine.com/the-forest-town © https://images.climate-data.org/location/4235/climate-graph.png; Attribution-NonCommercial 4.0 International (CC BY-NC 4.0);
Question 2 1 lg. 2.2	https://creativecommons.org/licenses/by-nc/4.0/
Question 2 Fig. 2.3	© https://skepticalscience.com/graphics/temp_vs_solar_med.jpg; Skeptical Science
Question 2 Fig. 2.4	© Climate Change and Vector-Borne Disease; Hugo Ahlenius; https://www.grida.no/resources/7718; CC 3.0; https://
Question 2 Fig. 2.5	creativecommons.org/licenses/by-nc-sa/3.0/ © Ref 704548498; Tote; Climate Change Cartoon series / Do you know what does Climate Change; www.shutterstock.com
Question 3 Fig. 3.1	© Adapted; The ring of active volcanoes, volcanic arcs, and tectonic plate boundaries that frame the Pacific Ocean; Encyclopedia
Question 3 Fig. 3.2	Britannica; https://www.britannica.com/place/Ring-of-Fire  © Adapted: Magnetic Evidence for Seafloor Spreading; https://k12.libretexts.org/Bookshelves/Science_and_Technology/Earth_ Science/Seafloor_Spreading
Question 3 Fig. 3.3	Science/05%3A_Plate_Tectonics/5.05%3A_Magnetic_Evidence_for_Seafloor_Spreading © Ref: 2E5WK6M; REUTERS / Alamy Stock Photo; An eruption from Mount Sinabung is seen from Beras Tepu village in Karo
Question 3 Fig. 3.4	district, Indonesia's North Sumatra province February 7, 2014; www.alamy.com  © Adapted: Swastik Nath; Analyzing earthquakes in USA to determine the possibly risky to quakes hotels; https://towardsdatascience.com/analyzing-the-earthquakes-in-usa-to-determine-the-possibly-risky-to-quakes-hotels-2a9ff162e747

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