# Anglo-Chinese School (Independent)



#### PRELIMINARY EXAMINATION 2024 YEAR 4 EXPRESS

GEOGRAPHY
PAPER 2
2279/02

Tuesday 13 August 2024 1 hr 45 min

Candidate Name:	Index No:
	Marks:
	/50

Candidates answer on the Question Paper.

Additional Materials: Insert

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

Write your index number and name on all the work you hand in.

Write in dark blue or black pen.

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

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

DO NOT WRITE ON ANY BARCODES.

Answer all questions.

The Insert contains additional resources referred to in the questions.

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

This document consists of 12 printed pages and 1 Insert.

### Answer all questions.

### 1 Cluster 1: Geography in Everyday Life

(a)	Study Fig. 1.1 (Insert) which shows the different regions in Singapore and Fig. 1.2 (Insert) which shows the distribution of nursing homes and the number of seniors who are aged 65 years old and above living in the different regions in Singapore.
	(i) With reference to Figs. 1.1 and 1.2, describe how nursing homes are distributed in Singapore.
	[2]
	(ii) With reference to Figs. 1.1 and 1.2 (Insert), suggest why nursing homes are distributed as you have described in 1(a)(i).
	[2]
(b)	Study Fig 1.3 (Insert), which shows a glamping experience along East Coast Park in Singapore. Glamping is a more comfortable and luxurious way of camping compared to traditional camping.
	With reference to Fig. 1.3, describe the benefits of glamping to people and nature.
	[3]

(c)	Study Fig. 1.4 (Insert), which shows Singapore.	the carpark at Keat Hong Colours estate	in
	Sketch the carpark as shown in Fig. promote environmental and social susta	1.4. Annotate the sketch to show how it ca	an
			17

(d) Study Fig. 1.5, which shows some unique aspects of Singapore.

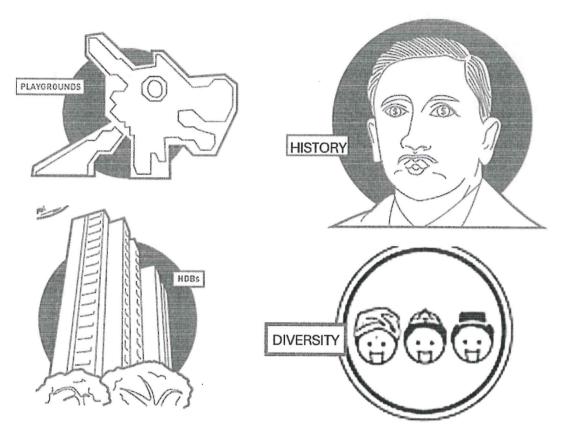


Fig. 1.5

Using Fig. 1.5, suggest how these unique aspects of Singapore can help develop sense of place among its residents.	a
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[4	ı
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[Total: 15]

#### 2 Cluster 4: Tectonics

(a) Study Fig. 2.1, which shows a volcano found along a plate boundary.

#### **VOLCANIC ERUPTION**

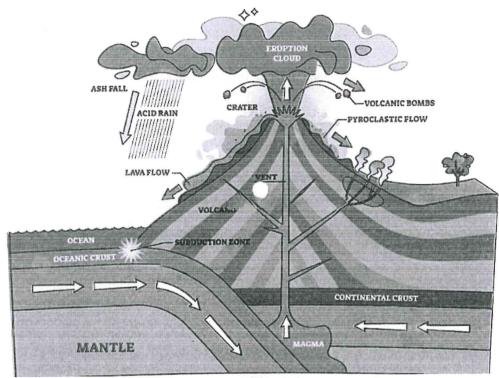


Fig. 2.1

(i) With reference to Fig. 2.1, identify the type of plate boundary shown.
[1]
(ii) Explain how pyroclastic flow affects natural and human systems.
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[41

	(iii) Suggest one factor that can increase the vulnerability of people to volcanic eruptions.
	[1]
(b)	'Providing timely evacuation is the most important strategy in response to an earthquake.'
	To what extent do you agree with the statement? Explain your answer.

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[9

[Total: 15]

3	Cluster	5:	Singapore
		- n	Suboid

(a)	Describe one internal and external challenge affecting tourism development in Singapore.
	[4]
(b)	Using examples, explain two ways Singapore can mitigate tectonic hazards.
	[4]

(c)	(i)	Study Fig. 3.1 (Insert), which shows the low-laying areas at risk of sea level rise Singapore.	ır
		Using Fig. 3.1, describe the distribution of areas in Singapore with elevation low than 5m above mean sea level.	/ei
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(6)	(11)	Study 3.2 (Insert), which shows an upcoming construction of coastal defence along East Coast Park.
		Using Fig. 3.2 and your own studies, discuss possible opportunities and challenges to the construction of Long Island along East Coast Park.
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		[4]
(d)	food o	Fig. 3.3 (Insert), which shows the 30 by 30 goal in Singapore, with the aim of ving the local production of 30% of the food needed in Singapore. Fig. 3.4 (Insert) is the percentage of local production of eggs, vegetables and seafood to our total consumption.  Figs. 3.3 and 3.4 (Insert), outline the challenges to increasing local food ction in Singapore and evaluate the effectiveness of efforts to overcome them.
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		[5]

[Total: 20]

### Additional page

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### Additional page

If you use the following page to complete the answer to any question, the question number must be
clearly shown.
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### Anglo-Chinese School

(Independent)



#### PRELIMINARY EXAMINATION 2024 YEAR 4 EXPRESS

2279/02

PAPER 2 GEOGRAPHY

**INSERT** 

Tuesday

13 August 2024

1 hr 45 min

Candidate Name:	Index No:

#### INSTRUCTIONS TO CANDIDATES

This Insert contains additional resources referred to in the questions.

This document consists of 7 printed pages.

Fig. 1.1 For Question 1

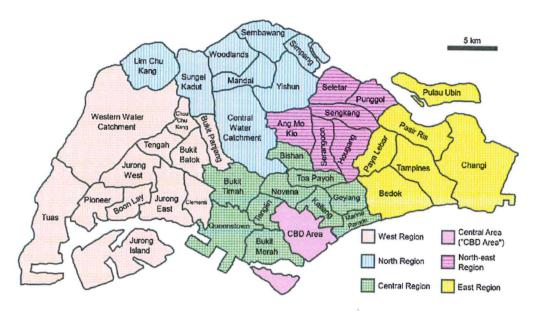
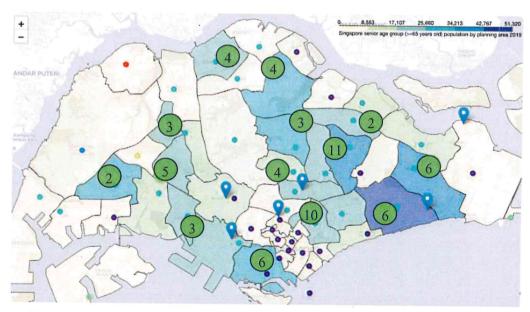


Fig. 1.2 for Question 1



2 Denotes number of nursing homes for each planning area.

Fig. 1.3 for Question 1

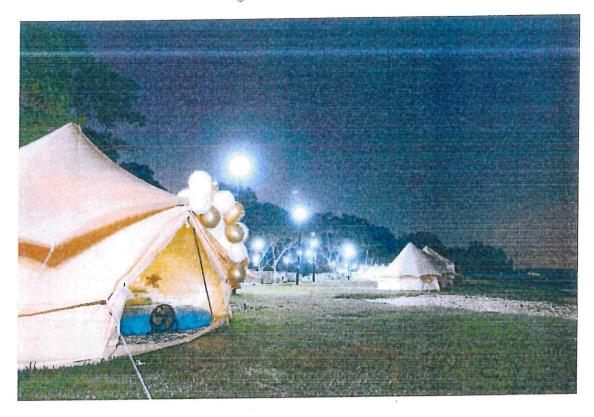


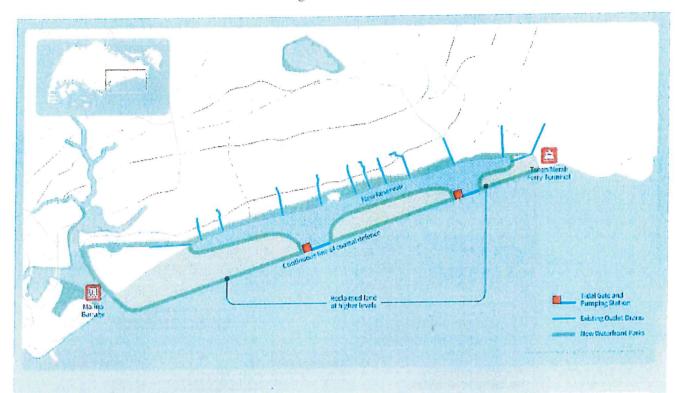
Fig. 1.4 for Question 1



Fig. 3.1 for Question 3



Fig. 3.2 for Question 3





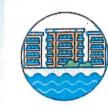
COASTAL
PROTECTION
Reclamation at a higher level so new land can provide protection against sea level rise



FLOOD RESILIENCE Two tidal gates and pumping stations for flood management



WATER RESILIENCE New freshwater reservoir to enhance our water supply



MORE LAND
For future land
use needs such as
waterfront living
and supporting
amenities



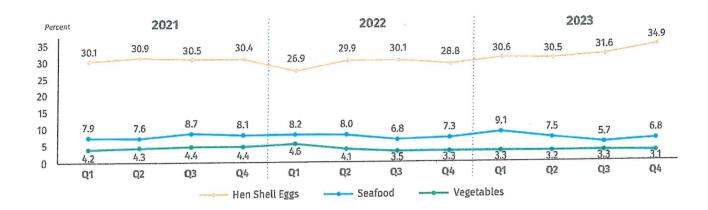
NEW
OPPORTUNITIES
Around 20 km of
new waterfront
parks and new
recreational
destinations

Fig. 3.3 for Question 3



Fig. 3.4 for Question 3

Local production as a percentage of Total Food consumption



#### Copyright Acknowledgements:

Question 1	Fig. 1.1	https://www.researchgate.net/figure/Major-planning-regions-of-Singapore-as-defined-by-the- Urban-Redevelopment-Authority-URA_fig1_361419955
Question 1	Fig. 1.2	https://www.linkedin.com/pulse/nursing-home-coverage-singapore-gim-pel-ng/
Question 1	Fig. 1.3	https://www.booking.com/hotel/sg/glamping-city-singapore.en-gb.html
Question 1	Fig. 1.4	https://www.hdb.gov.sg/about-us/news-and-publications/publications/dwellings/the-world-
		beyond-walls
Question 1	Fig. 1.5	https://www.shutterstock.com/image-illustration/3d-illustration
Question 2	Fig. 2.1	https://www.internetgeography.net/topics/what-are-lahars-and-pyroclastic-flows/
Question 3	Fig. 3.1	https://www.channelnewsasia.com/singapore/rising-sea-levels-low-lying-vulnerable-coastal-
		protection-long-island-3955651
Question 3	Fig. 3.2	https://thecontinuumbyhoihup.sg/long-island-a-vision-for-sustainable-development/
Question 3	Fig. 3.3	https://www.facebook.com/SGFoodAgency/posts/the-singapore-food-story-with-most-of-our-
		food-imported-from-overseas-singapore-/2115014661908383/
Question 3	Fig. 3.4	https://www.sfa.gov.sg/files/SingaporeFoodStatistics/SFA_SingaporeFoodStatistics1/files/basic-html/page17.html

#### SUGGESTED ANSWER FOR ACSI PRELIM PAPER TWO 2024

# 1ai) With reference to Figs 1.1 and 1.2, describe how nursing homes are distributed in Singapore. [2m]

- they are fairly distributed throughout the country
- most concentration in the CBD area with 10 homes and 11 homes in Hougang (well-elaborated 2 points at 1 mark each, answer must quote numbers and named locations)

### 1aii) Suggest why nursing homes are distributed as you have described.[2m]

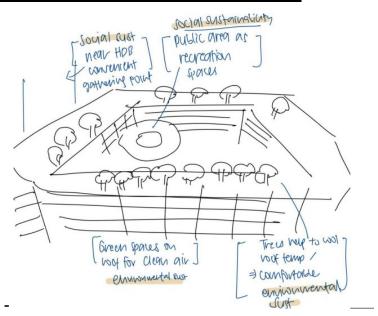
- -the nursing homes need to be easily accessible to residential areas
- more homes in Hougang which is a mature estate with more elderly residents

(well-elaborated 2 points at 1 mark each, answer must quote named locations and explain the reasons for the location)

### 1b) With reference to Fig, describe the benefits of glamping to people and nature. [3m]

- unique experience to experience nature and camping with friends and family at the park
- experience can be a way to release stress for people as they appreciate nature better
- more parks will be conserved so that more nature areas are available for glamping (well-elaborated 3 points at 1 mark each)

### 1c) Sketch the carpark as shown. Annotate the sketch to show how it can promote environmental and social sustainability. [4m]



(2 marks for correct drawing of carpark, 1 mark each for correct annotation/ description of full sentences of one point on environmental and one point on social sustainability, students lost marks for not drawing the sketch properly and not annotating the points correctly)

# 1d) Using Fig, suggest how these aspects of Singapore can help develop a sense of place among its residents. [4m]

- playgrounds are common gathering places for residents where children play and build memories
- HDB flats are common among Singaporeans where most of them stay there and create more memories of growing up there
- in Singapore, multi races live harmoniously together especially in HDB estates and create a good sense of place where neighbours interact together and celebrate different festivals such as Hari Raya, Chinese New Year and Deepavali
- local historian such as Yusof Ishak binds residents together with a common history that they lean in school

(well-elaborated 4 points on each of the item at 1 mark each, students lost marks for not describing well in relation to sense of place in Singapore)

#### 2ai) Identify the type of plate boundary shown. [1m]

It is convergent boundary between oceanic and continental plates

(many students lost marks for not mentioning oceanic and continental plates)

#### 2aii) Explain how pyroclastic flow affects natural and human systems. [4m]

- pyroclastic flow affects natural system because it destroys forests and kills animals in the forests such as monkeys and snakes and affects habitat of animals
- pyroclastic flows affects natural systems because it causes water pollution to the lakes and rivers and kill marine lives from the gases and volcanic bombs that will mix with the river water
- pyroclastic flow affects human because some might be injured or killed by the hot flow
- pyroclastic flow affects human because it destroys houses thus making people homeless

(well-elaborated 2 points on impacts to nature and 2 points on impacts on human)

# <u>2aiii)</u> Suggest one factor that can increase the vulnerability of people to volcanic eruptions. [1m]

- areas with strong wind direction will bring the volcanic ash towards the farm and village and cause damage to the crops and breathing difficulties to the people
- OR areas with high population density will suffer more damage from volcanic eruptions due to many people who will try to evacuate at the same time
- OR poor residents who stay in the area such as poor farmers might not be able to evacuate fast and suffer more from eruptions.

(well-elaborated one point at 1 mark, students lost marks for not elaborating their point well)

# 2b) 'Providing timely evacuation is the most important strategy in response to an earthquake'. To what extent do you agree with this statement? Explain your answer. [9m]

level	Marks	Descriptors
3	7 – 9	Develops <u>arguments</u> that support <u>both side</u> of the discussion <u>clearly</u> , using a <u>range of points</u> with <u>good elaboration</u> . <u>Examples</u> of locations of earthquakes were used to demonstrate a <u>comprehensive understanding</u> of the issue. <u>Evaluation</u> is derived from <u>well-reasoned consideration</u> of the <u>arguments on timely evacuation and other short term responses with decision on one of them as important <u>strategy</u>.</u>
2	4 – 6	Develops arguments that support one side of the discussion well, using one or two points with some elaboration.  Examples used demonstrate a good understanding of the issue.  Evaluation is well supported by arguments on either timely evacuation or other short term responses after earthquake
1	1-3	Arguments are unclear with limited description or mere listing.  No examples provided or examples are generic,  Demonstrating a basic understanding of the issue.  Evaluation is simple, missing or unclear.
0	0	No credit worthy response

(students lost marks for not quoting named locations of earthquakes in their answer, not writing in proper sentences and not writing points in detail, or describing mitigation factors such as building stronger buildings or practicing for earthquake drills or use tsunami warning system or proper land use planning)

- must describe in detail points on <u>timely evacuation of survivors to temporary</u> **shelter** and giving them food, water, medicine, blanket to save lives
- must describe in detail **search and rescue efforts** to save lives that needs to be done withing 72 hours
- provide <u>insurance claims</u> to affected survivors for damaged farms and houses and for claims on injuries or deaths
- provide **couselling** to survivors so that they can continue life without their loved ones
- <u>rebuild and repair</u> damaged buildings and infrastructure such as roads and electrical cables

### 3a) Describe one internal and one external challenge affecting tourism development in Singapore. [4m]

- <u>internal challenge is ageing population</u> in Singapore thus the workers are getting older and might not be able to work long hours and attract more tourists, elderly workers might not be able to catch up with the latest technology in use of IT in tourism industry too
- OR <u>internal challenge is that Singapore has limited land area</u> with competition of land use for residential, transport, recreational thus not much land available to build new man made attractions
- <u>external challenge is competition from our neighbouring countries</u> which may attract more tourists such as Malaysia and Thailand will attract more tourists due to their cheaper exchange rates and availability of more natural attractions

(well-elaborated point on internal and point on external challenges, at 2 marks for each point, students lost marks for not describing the points well)

# 3b) Using examples, explain two ways Singapore can mitigate the tectonic hazards. [4m]

- Singapore has public warning system where SCDF has installed at many buildings, these warning systems will sound the 300 sirens to alert residents of any danger so that they can be evacuated early
- SCDF trains the people in the Disaster Response Team so that they are able to respond during emergency and rescue them example the Lionheart rescue team

(well-elaborated 2 points with named examples, students lost marks for not describing in detail)

### 3ci) Describe the distribution of areas in Singapore with elevation lower than 5 metre above mean sea level. [3m]

- most areas below 5 metres are located near the coast
- most areas are near eastern Changi and west of Tuas
- some areas in south western part near Kallang, Katong and Siglap

(well-elaborated 3 points with named locations, students lost marks for not describing well)

### 3cii) Using Fig and own studies, discuss possible opportunities and challenges to the construction of Long Island along East Coast Park. [4m]

- possible opportunity is that the area can be used for coastal protection and prevent flood, the area will be on higher ground with 2 tidal gates and pumping station to manage floods
- possible challenge is impact on biodiversity where building the long island might cause harm on marine lives and plant species in the area
- OR possible challenge is expensive to buy sand from overseas to create the long island

(well-elaborated 2 points on opportunities and 2 points on challenges)

# 3d) Outline the challenges in increasing local food production in Singapore and evaluate the effectiveness of efforts to overcome them. [5m]

- challenge is the limited land area available for agriculture since much of the land is used for housing, transport, industry, thus it is not possible for large scale food production
- challenge is our dependence on overseas countries for food at 90%, thus we will be affected by any changes to these countries thus it is better for us to have our own local food and not depend on others
- the 30 by 30 initiative should be effective because we have skilled labour, technology and use of vertical and high tech farming
- it is effective for production of eggs at 34% increase but not too effective for production of vegetables and seafood which only increase by 6% and 3% respectively

(well-elaborated 2 points on challenges and 3 points on effectiveness at 1 mark each)