

Anglo-Chinese School

(Independent)



PRELIMINARY EXAMINATION 2025 YEAR FOUR O-LEVELS

Candidate Name

Index Number

Paper 2 Geography

2279/02

Tuesday

19 August 2025

1 hour 45 minutes

Candidates answer on the Question Paper.

Additional Materials: Insert

READ THESE INSTRUCTIONS FIRST.

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

Write in dark blue or black pen.

You may use a 2B pencil for any diagrams or graphs.

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

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.

The total number of marks for this exam is **50**.

This document consists of **12** printed pages and **1** Insert.

[Turn Over

Answer **all** questions.

1 Cluster 1: Geography in Everyday Life

- (a)** Study Fig. 1.1 (Insert), which shows a garden in a housing estate in Singapore.

Using Fig. 1.1, explain how the garden may provide provisioning and cultural ecosystem services.

.....

.....

.....

.....[2]

- (b)** Study Fig. 1.2 (Insert), which shows the top three causes of residential fires in Singapore in 2019 and 2020.

- (i)** Using Fig. 1.2, compare the trend in the top three causes of residential fires between 2019 and 2020.

.....

.....

.....

.....[2]

- (ii)** Describe how fires can negatively affect the residents.

.....

.....

.....

.....[2]

- (iii)** Explain how building community resilience might reduce the risk of residential fires.

.....

.....

.....

.....[2]

- (c)** Study Fig. 1.3 (Insert), which shows an activity for children conducted weekly in a community centre in Singapore.

Explain how the activity helps to enhance a sense of place for children.

.....

.....

.....

.....[2]

- (d)** Study Fig. 1.4 (Insert), which shows a woman attacked by a wild boar in Singapore.

With reference to Fig. 1.4, describe the negative impacts that nature may bring to society.

.....

.....

.....

.....[2]

- (e) Study Fig. 1.5 (Insert), which shows a recycling bin at a housing estate in Singapore.

With reference to Fig. 1.5, evaluate the effectiveness of recycling bins in promoting environmental stewardship in neighbourhoods in Singapore.

.....

.....

.....

.....

.....

.....[3]

[Total: 15]

2 Cluster 4: Tectonics

- (a)** Study Fig. 2.1 (Insert), which shows a diagram on magnetic striping.

Using Fig. 2.1, identify landform X and state whether rocks W or Y are older.

.....

.....

.....

.....[2]

- (b)** Study Fig. 2.2 (Insert), which is a diagram showing the formation of a tsunami.

Using Fig. 2.2, describe the formation of a tsunami.

.....

.....

.....

.....

.....

.....

.....

.....[4]

- (c)** “Land use planning is the most important strategy in building community resilience to earthquakes and volcanic eruptions.”

How far do you agree with this statement? Explain your answer.

This image shows a full page of white paper with horizontal dotted lines, typical of primary school writing paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

3 Cluster 5: Singapore

- (a)** Study Fig. 3.1 (Insert), which shows Singapore's '3 food baskets'.

With reference to Fig 3.1 and named examples, describe two strategies from the 'food baskets' to maintain an adequate food supply in Singapore.

.....

.....

.....

.....

.....

.....

.....

.....

.....[4]

- (b)** Explain the challenges Singapore would face if a nearby region were to experience a mega-earthquake.

.....

.....

.....

.....

.....

.....[3]

- (c)** Study Fig. 3.2 (Insert), which shows some buildings in Marina Bay in Singapore.

Using Fig. 3.2, explain how the development of the Marina Bay area supports Singapore's goals for sustainable development.

.....

.....

.....

.....

.....

.....[3]

- (d)** Evaluate the effectiveness of two initiatives to build social resilience to achieve sustainable development in Singapore.

.....

.....

.....

.....

.....

.....

.....

.....[4]

- (e) Study Fig. 3.3, which is adapted from a newspaper article on Jurong Island.

Jurong Island is looking greener than ever, with the addition of 34,000 trees since 2020. The number of trees on the island has quadrupled to 44,000 in April 2023 from 10,000 in 2019. This comes after the conclusion of a three-year Greening Project by Jurong Town Council (JTC) Corporation and the National Parks Board (NParks), the two agencies said in a joint statement on Friday.

The trees will also help to cool down the island – which is in one of the hotter areas in Singapore – by reducing the urban heat island effect. JTC’s master plan to green Jurong Island is a great step towards making Singapore’s City in Nature vision a reality.

Adapted from The Straits Times. Published on 21 April 2023.

Fig. 3.3

- (i) Explain what is meant by the urban heat island effect.

.....

.....

.....

.....[2]

- (ii) With reference to Fig. 3.3, explain how the development of Jurong Island contributes to Singapore’s economic growth without compromising the quality of life of its nearby residents.

.....

.....

.....

.....

.....

.....

.....

.....[4]

[Total: 20]

Additional page

Additional page

Anglo-Chinese School
(Independent)



**PRELIMINARY EXAMINATION 2025
YEAR FOUR O-LEVELS**

Paper 2 Geography

2279/02

INSERT

Tuesday

19 August 2025

1 hour 45 minutes

READ THESE INSTRUCTIONS FIRST

This Insert contains additional resources referred to in the question.

This document consists of **6** printed pages.

[Turn Over

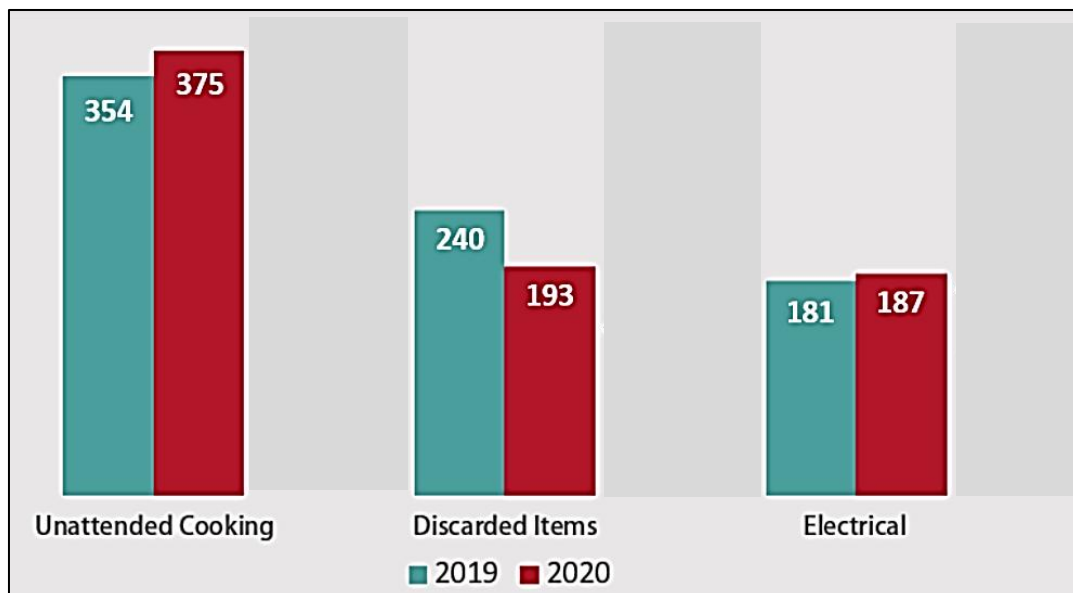
Fig. 1.1 for Question 1(a)**Garden in a housing estate in Singapore****Fig. 1.2 for Question 1(b)****Causes of residential fires in Singapore**

Fig. 1.3 for Question 1(c)

Activity for children in a community centre



Fig. 1.4 for Question 1(d)

Negative impacts of nature to society



Fig. 1.5 for Question 1(e)

Recycling bin in Singapore



Fig. 2.1 for Question 2(a)

Diagram showing magnetic stripping

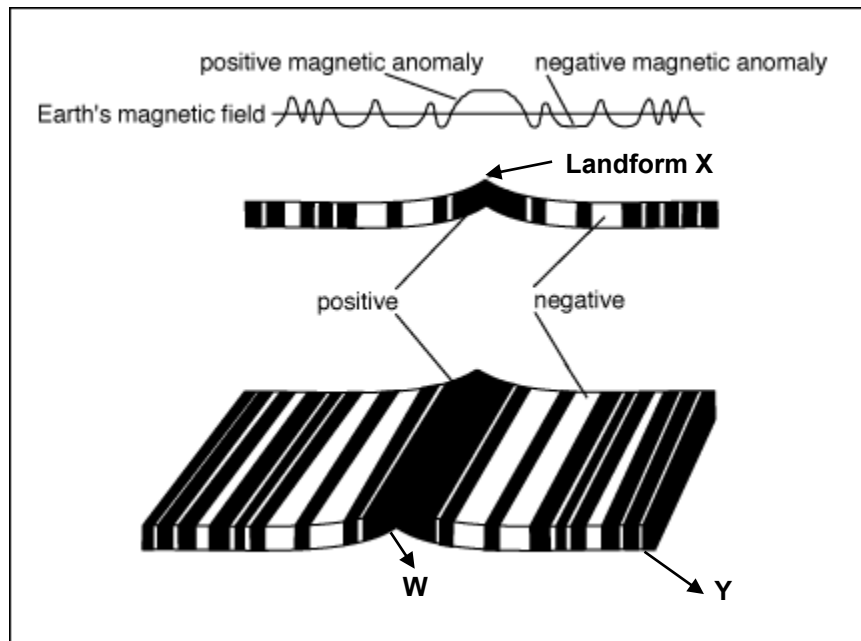


Fig. 2.2 for Question 2(b)

Diagram showing formation of a tsunami

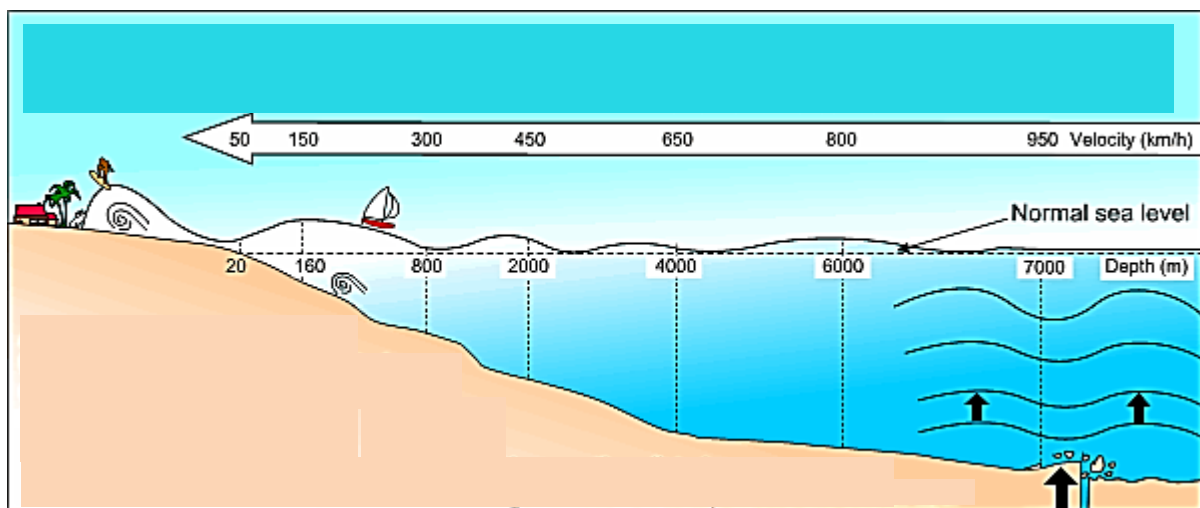


Fig. 3.1 for Question 3(a)

Singapore's '3 food baskets'



Fig. 3.2 for Question 3(c)

The Marina Bay area



BLANK PAGE

Copyright Acknowledgements:

Question 1 Fig. 1.1	https://www.hbptc.org.sg/wp-content/uploads/2022/09/210123-17.png
Question 1 Fig. 1.2	https://dollarsandsense.sg/wp-content/uploads/2022/03/SCDF_Fire.png
Question 1 Fig. 1.3	https://www.stf.sg/wp-content/uploads/2020/01/grading-preparation-workshop-saturday-16-september-2017-01.jpg
Question 1 Fig. 1.4	https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcQCJe99DMDMfAQDs-KArjQ7jmK4-yxuoZC1J4w&s
Question 1 Fig. 1.5	https://dam.mediacorp.sg/image/upload/s--V3PYv3hl--c_crop,h_675,w_1200,x_0,y_283/c_fill,g_auto,h_468,w_830/f_auto,q_auto/v1/mediacorp/cna/image/2024/03/05/veron_wong_recycling_bin.jpeg?itok=H1V50L6b
Question 2 Fig. 2.1	https://www.cyberphysics.co.uk/graphics/diagrams/Earth/seafloorspreading.gif
Question 2 Fig. 2.2	https://geohazards.massey.ac.nz/tsunamis/pics/figure1t.gif
Question 3 Fig. 3.1	https://sustainability.nus.edu.sg/wp-content/uploads/2021/11/SFA_Food-Security-Deck_NUS-UCI_updated-5-Oct-2020-5-1024x576-1.jpg

Anglo-Chinese School
(Independent)



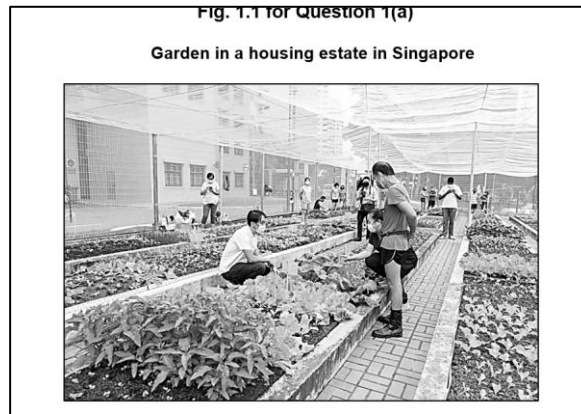
**PRELIMINARY EXAMINATION 2025
YEAR FOUR O-LEVELS**

Paper 2 Geography

2279/02

MARKING SCHEME

- 1 (a) Using Fig 1.1, explain how the garden may provide provisioning and cultural ecosystem services. [2m]



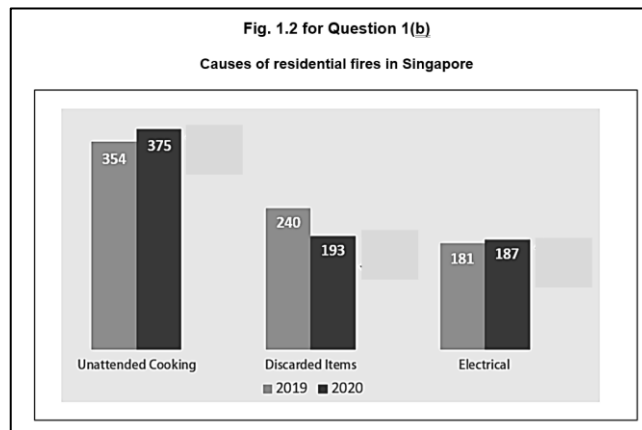
Award 1 mark each for correct explanation of 2 services, up to max 2 marks.

Possible responses include:

The vegetables grown at the community garden provide provisioning ecosystem services where the vegetables can be source of food supply for residents

The nice scenery of plants in garden provide cultural ecosystem services to residents to relax as they enjoy the scenery

- 1 (b) (i) Using fig 1.2, compare the trend in the top three causes of residential fires between 2019 and 2020. [2m]



Award 1 mark each for correct description of a similarity and difference with data from the graph, up to max 2 marks. Max 1 mark if no data is quoted in answer.

Possible responses include:

The similarity is there is increase in fires due to unattended cooking by 21 and electrical by 6.

The difference is there is decrease in fires due to discarded items by 47

1 (b) (ii) Describe how fires can negatively affect the residents. [2m]

Award 1 mark each for correct description of 2 points, up to max 2 marks.

Possible responses include:

Fires can cause injuries and deaths to residents who suffer from the burns or smoke inhalation

Residents have to spend money repairing damage to their homes from the fires

1 (b) (iii) Explain how building community resilience might reduce the risk of residential fires. [2m]

Award 1 mark each for correct explanation of 2 points on community resilience, up to max 2 marks.

No marks awarded for writing having extinguisher or fire alarm at home.

Neighbours can help to look out for any fire occurrences and help to extinguish the fire before it can spread to more houses while waiting for the arrival of SCDF

Volunteers who are the Community First Responders can help to educate the neighbours on fire hazard and encourage them to be alert while cooking, not to charge PMD illegally and look out for spoilt electrical wiring to prevent residential fires.

1 (c) Explain how the activity helps to enhance a sense of place for children. [2m]

Award 1 mark each for 2 well-explained points, up to max 2 marks.

Possible responses include

The weekly training sessions formed good memories for the children as they train together with their friends

The repeated activity done weekly will enhance their sense of place as they keep going to the same place for the taekwondo training

1 (d) With reference to Fig 1.4, describe the negative impacts that nature may bring to society. [2m]

Award 1 mark each for correct description of 2 points including attack by wildboar

Possible responses include:

Wild boar may attack human and caused injuries when they are provoked

Monkeys might enter our house to search for food and caused items to be broken

(or otters might eat the expensive koi fishes and caused financial loss to residents)

- 1 (e) With reference to fig 1.5, evaluate the effectiveness of recycling bins in promoting environmental stewardship in neighbourhoods in Singapore.[3m]

Award 1 mark each for correct explanation of at least one point on effective and not effective with max 3 marks. Answer must be based on the photo.

Possible responses include

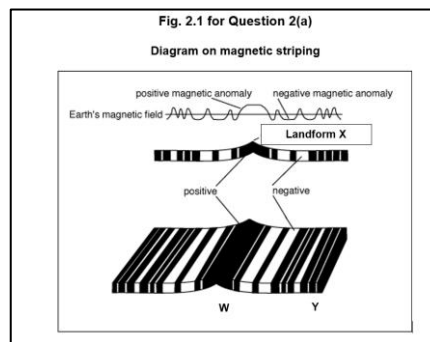
It is effective because there is a recycling bin in the neighbourhood for the residents to recycle items

However it not effective because the bin is overflowing with rubbish indicating that there might not be enough recycling bins in the area

It is not effective because residents might not be aware of what items are accepted for recycling and throw all types of items into the bin

- 2 (a) Using Fig. 2.1, identify landform X and state whether rocks W or Y are older.

[2m]

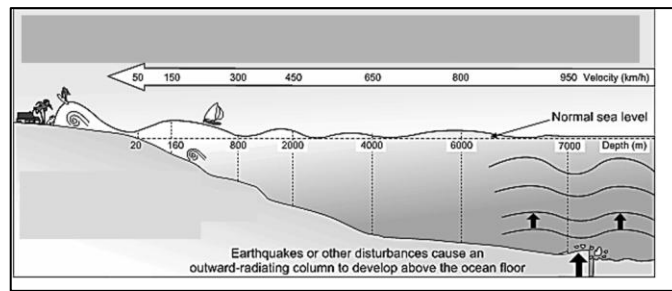


Award 1 mark each for correct identification of X and the older rocks, up to max 2 marks

Landform X is mid-oceanic ridge

Y are older rocks

2 (b) Using Fig 2.2, describe the formation of a tsunami. [4m]



Award 1 mark each for correct description of 4 points on formation of tsunami, up to max 4 marks.

Max 3 marks if no data from diagram is quoted in answer.

Possible responses include:

Undersea earthquake causes the seabed to be displaced

The waves start with great wavelength and low wave height away from the coast and very high wave height and short wavelength at the coast

The waves travel towards the coast decreasing the wave speed from 950km/h to 50km/h

The depth of sea decreases from 7000m to around 20m at the coast

4 (c) "Land use planning is the most important strategy in building community resilience to earthquakes and volcanic eruptions."

How far 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 and volcanic eruptions 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 most <u>important strategy</u> for <u>community resilience</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 land use planning or other strategies for community resilience
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

Land use planning

- reduce community's exposure to tectonic hazards by controlling and minimising development in high-risk areas
- strict guidelines to control development using hazard maps with data on past earthquakes
- this will lower injuries and damage to properties
- limitation is that some locals will still not follow the guidelines on locating their houses
- eg the Japanese have been following the strict guidelines on location of houses away from high-risk areas

Monitoring and warning systems

- devices used to detect seismic waves and earthquakes to make predictions and send warnings on potential hazards
- warnings enable locals to evacuate to safer place thus lowering death rate
- eg tsunami warning system in the Pacific Ocean helped to detect oncoming tsunami and able to give early warning to the residents to evacuate to safety
- limitation is that the systems might be expensive and need constant maintenance or the warning might not be accurate in detection of hazard

Increase preparedness for response and recovery

- evacuation drills can be conducted often to remind residents on evacuation procedures and routes to reduce injuries and death rate
- limitation is that some communities lack the knowledge and not much effort done to educate the locals on community preparedness or some developing countries are suffering from political instability with corrupted governments who are not interested in community resilience efforts
- eg Japanese practice evacuation drills yearly on 1st September known as Disaster Prevention day in schools and the residential areas to familiarize the locals on evacuation routes and thus lower the death rate for the Tohoku tsunami in 2011
- eg Haiti earthquake in 2010 caused 220000 deaths with many locals not knowing the evacuation routes and looting took place instead of rescue personnel helping the survivors

- 3 (a) With reference to Fig 3.1 and named examples, describe two strategies from the 'food baskets' to maintain an adequate food supply in Singapore. [4m]



Award 2 marks for correct description of 2 strategies from the diagram with named examples, up to max 4 marks.

Max 3 marks if no named examples are given in the answer.

Possible responses include:

Singapore diversify our import of more than 90% of our food sources from around 170 countries such as Malaysia, Thailand and Vietnam, to reduce dependence on single source

Singapore grow locally by having our own vegetable, chicken and fish farms so that we are not reliant on others if there are any disruptions to global food supplies. Example Seng Choon egg farm in Lim Chu Kang rear many chickens in the modern farm which produces thousands of eggs daily.

(or Singapore grow overseas where our local farmers ventured overseas in Australia and China such as Sky Greens company in China to grow vegetables there and output is sent back to us)

- 3 (b) Explain the challenges Singapore would face if a nearby region were to experience a mega-earthquake. [3m]

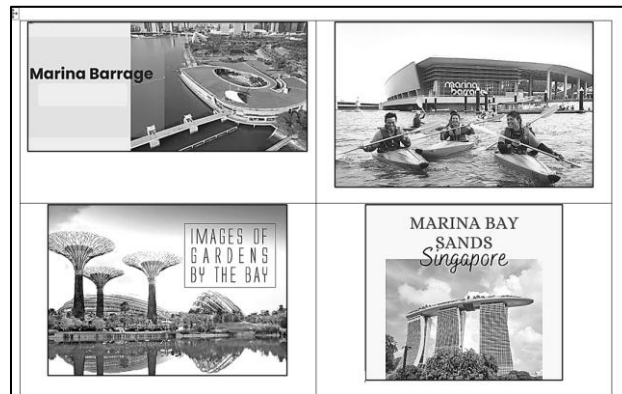
Award 1 mark each for correct explanation of 3 challenges of mega-earthquake, up to max 3 marks.

Possible responses include

Places that are built on stronger and more resistant rocks will be less affected by earthquakes in our nearby region.

Places built on reclaimed land are more prone to soil liquefaction caused by earthquakes which will cause destruction of buildings and infrastructure here. Some parts of Singapore which are low-lying will be subjected to flooding from tsunami from the mega earthquake. Floods will cause more damage to properties and increase death rate.

- 3 (c) Using Fig 3.2, explain how the development of the Marina Bay area supports Singapore's goals for sustainable development. [3m]



*Award 1 mark each for correct explanation of 3 types of sustainable development, using named locations as shown in in Fig 3.2, up to max 3 marks.
Max 2 marks if no named areas are quoted in answer.*

Possible responses include

Marina Bay Sands provide many job opportunities or economic sustainability such as working as waiter and front desk in the hotel or in the many shops in the mall.

Gardens by the Bay provide environmetal sustainability with use of solar power, recycled water in toilets and many energy-friendly resources in the Flower Dome area

Marina Barrage provides social sustainability where recreational activities such as kayaking can be done for people to socialise and enjoy themselves

- 3 (d) Evaluate the effectiveness of two initiatives to build social resilience to achieve sustainable development in Singapore. [4m]

Award 1 mark each for correct explanation of 2 points each in terms of effective and not effective for the 2 initiatives, up to max of 4 marks.

Possible responses include

Developing skills throughout life through skills future work study program is effective as workers pick up skills and gain work experience together with on the job training and classroom training. However it may not be that effective because not all workers have the time to go for courses to upgrade their skills.

Creating shared spaces is effective in bringing people together to foster relationships to build social resilience and community bonding. This is done with building of more children playground in the newer HDB estates with creative equipment using sustainable resources. However it might not be that effective because not all children prefer to play in outdoor playground and choose indoor playground with aircon comfort.

3 (e) (i) Explain what is meant by the urban heat island effect. [2m]

Award 1 mark each for 2 points on correct definition, up to max of 2 marks.

Possible responses include

Urban heat island effect occurs at area with many buildings and concrete surfaces. The buildings absorb and retain heat during the day and release it slowly at night thus making the area warmer at night and at daytime

3 (e) (ii) With reference to Fig 3.3, explain how the development of Jurong Island contributes to Singapore's economic growth without compromising the quality of life of nearby residents. [4m]

Award 1 mark each for well-explained 2 points each on economic growth and quality of life of Jurong Island, up to max of 4 marks.

Possible responses include

There are few petro-chemical industries at Jurong Island which provides jobs for the locals and ensure high economic growth for Singapore.

(or there are also few companies specialising in clean energy in the Island)

There are many trees grown at Jurong Island to ensure shade, areas to relax for workers and to make the area more attractive. The trees will reduce urban heat island effect in the Island.
