



**NAN HUA HIGH SCHOOL**  
**Preliminary Examination 2025**

CANDIDATE  
 NAME

CENTRE  
 NUMBER





CLASS




INDEX  
 NUMBER



**GEOGRAPHY**

**2279/01**

Paper 1

27 August 2025

1 hour 45 minutes

Candidates answer on the Question Paper.

**READ THESE INSTRUCTIONS FIRST**

Write your name, class, and index number 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/tape.

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 mark for this paper is **50**.

Answer **all** questions.

## 1 Cluster 1: Geography in Everyday Life

Marina Bay Sands in Singapore is popular with tourists for its iconic architecture, and world class shopping and dining amenities. A group of students wanted to investigate the research question, 'Which area in Marina Bay Sands is the most popular with visitors?'

Fig. 1.1 shows the map of Marina Bay Sands where the students conducted their investigation.

(a) Describe two factors that the students should consider when deciding on the fieldwork locations in Marina Bay Sands. [2]

- Students have to take note of traffic hazards in the area and road crossing procedures.
- Students have to consider if there are enough of them to be deployed for the investigation at the different sites so that the data is representative enough for the investigation.

(b) The students wanted to design a closed ended questionnaire to answer their research question.

With reference to Fig. 1.1, explain how the students could collect the data needed to answer their research question. [5]

### Location / Site

- The students can pair up and locate themselves at the entrances of MBS / taxi stands / MRT station entrances as the range and volume of visitors would be the greatest.
- These locations are ideal as they are where most visitors would alight and enter Marina Bay sands hence providing opportunities for students to approach the visitors easily.

### Sampling method

- Students could use the simple random sampling as it is used to remove bias that may come from the choices made by the students / has a greater chance of creating a representative sample.
- Students could use a random number generator / a die to select the visitors to survey.

### Duration / Time

- Students should also conduct the questionnaire for an hour, 3 times in the day to ensure representation of the visitors within the day.
- Students should also consider conducting the questionnaire for a week at the same time periods.

- (c) To further support their investigation, the students also counted the number of visitors to Marina Bay Sands.

They positioned themselves at several locations: at the four Bayfront Mass Rapid Transit (MRT) entrances that connect to Marina Bay Sands and the three Marina Bay Sands taxi stands on a weekday to conduct the count of visitors. They used a tally counter to count the visitors. Table 1.1 shows a tabulation of their data.

Time	No. of visitors at the entrances of Bayfront MRT station	No. of visitors at Marina Bay Sands Shoppes taxi stands
10.00am - 11.00am	250	80
11.00am - 12.00pm	350	150
12.00pm - 1.00pm	300	180
1.00pm - 2.00pm	400	130

Table 1.1

- (i) From Table 1.1, identify the period of day that has the highest number of visitors. [1]
- 1pm - 2 pm
- (ii) Suggest how the students could present the data in Table 1.1. [3]
- The students could present the data in a bar graph.
  - The x-axis would be the time periods while the y-axis would be the number of visitors.
  - There will be two bars per time period to show the count at the entrances of Bayfront MRT stations and the count at the taxi stands. / The total number of visitors should be added up to plot the total number of visitors during each time period.
- (iii) Evaluate the reliability of the data collected by the students in the visitor's count. [6]

**Reliable**

- The students paired up so that they can be located at more sites to do the counting which made the data more representative of the visitors which in turn increases the reliability of the data collected.
- They also selected appropriate locations such as MRT entrances and taxi stands which are linked to MBS and these locations are where visitors will alight to enter MBS hence making the data reliable.
- These locations also allow the students to get the range and volume of visitors needed to collect the data.
- They use a tally counter for their counting hence removing the human error of double counting which made the data collected reliable.

**Not reliable**

- However, the students only conducted the counting on one weekday which may not be representative of visitors' number entering MBS on other days.
- They conducted the counting from 10 am to 2 pm which does not represent visitors numbers at other timings of the day.

(d) As an extension of their learning, the students thought of investigating the hypothesis, '*The ArtScience Museum is the most popular in the Marina Bay Sands area.*' with locals. They thought of using mental maps to collect data. [3]

Describe how the students could use mental maps to investigate this hypothesis.

- Blank papers could be given to locals to draw features in a map form such as what they know, believe and / or feel about the Marina Bay Sands area. [1 mark] Free form mental maps are representative of the visitors' perceptions of the two places. [1 additional mark]
- A base map could also be given if locals could not draw from scratch and students could ask locals to add details by labeling or annotating their perceptions of the features in the Marina Bay Sands area.
- Using mental maps drawn as discussion points, semi structured interviews with open-ended questions can be conducted to find out more about the mappers' perceptions of the area [1 mark]
- Check to see if the ArtScience Museum is featured in the mental maps / how the ArtScience Museum is featured [1 mark].

## 2 Cluster 2: Tourism

(a) Study Figs. 2.1 and 2.2 which show some tourism statistics of New Zealand from 2013 to 2016.

International Visitor Arrivals for 2013 - 2016							
	2013	2014	2015	2016	2014	2015	2016
					Annual Percentage change (%)		
Oceania	1,311,872	1,359,120	1,415,588	1,514,080	3.6	4.2	6.9
Asia	528,624	575,200	681,568	814,640	8.8	18.5	19.5
Americas	264,576	285,664	307,024	348,192	8.0	7.5	13.4
Other regions	88,880	98,048	88,624	89,472	10.3	-9.6	1.0
<b>Total</b>	<b>2,611,377</b>	<b>2,752,257</b>	<b>2,947,901</b>	<b>3,255,463</b>	<b>5.4</b>	<b>7.1</b>	<b>10.4</b>

Source: <http://www.tdc.co.tt/index.php>

Fig. 2.1

Total Tourism Expenditure by tourists				
Year	Total Tourism Expenditure \$ (million)	Annual percentage change	Gross Domestic Product \$ (million)	International tourism as a percentage of total exports
2013	26 947	1.3	62 766	15.8
2014	28 039	4.1	67 002	15.4
2015	30 935	10.3	67 514	17.9
2016	34 699	12.2	70 144	20.7

Source: <http://www.tdc.co.tt/index.php>

Fig. 2.2

(i) Using Fig. 2.1, describe the trend of visitor arrivals to New Zealand from 2013 to 2016. [3]

- In general, visitor arrivals to NZ have increase from 2013 to 2016, from 5.4% change in 2014 to 10.4% in 2016.
- The largest increase was from Asia, from 8.8% change in 2014 to 19.5% in 2016
- Oceania has the smallest increase from 3.6% change in 2014 to 6.9% in 2016.
- Other regions showed a decline from 10.3% change in 2014 to 1% in 2016. In fact, there was a significant drop in visitor arrivals in 2015 which resulted in -9.6% change compared to the previous year.

(ii) With reference to Figs. 2.1 and 2.2, explain how tourism is both beneficial and risky to New Zealand's economy. [3]

### Benefits

- Tourism brings significant benefits to the NZ economy through its earnings. For instance, in 2013, the country earned \$26.9billion and in 2016, the earnings increased to \$34.7billion / tourism as a percentage of total exports has increased from 15.8% to 20.7%.
- International tourism accounts for 20.7% of NZ's total exports. This would have led to jobs and stimulated local businesses.
- Tourism may lead to more investments into NZ due to greater awareness of business opportunities there.

### Risks

- However, the fact that it accounts for 20% of NZ's exports indicate its reliance on this sector of the economy. This makes NZ vulnerable to fluctuations in visitor arrivals due to economic downturns, outbreak of diseases and other disasters.
- This would impact NZ negatively, for eg. loss of jobs, closure of businesses which affects NZ's economy negatively.

(b) Explain how expansion of public transport services and infrastructure has contributed to the growth of tourism. [3]

- More countries are constructing transport infrastructure such as roads, railways and airports.
- Connectivity within different parts of a country as well as between countries has increased. Tourists can travel to more places in shorter times.
- Many countries have also expanded their network of public transport services by increasing the number of public bus and train routes.
- Travelling within the destination region has become more convenient for tourists, leading to tourist growth.

(c) Study Fig. 2.3 (Insert), which shows a beach next to the Aegean Sea in Greece. The beach is popular among the locals and visited by many tourists every year.

With reference to Fig. 2.3, suggest how tourism could damage the local environment. [5]

- The beach is badly littered with plastic bottles and other waste. These bottles are non-biodegradable and can lead to environmental degradation such as land and water pollution. [1 mark]
- The beach is crowded with tourists who may make too much noise and may disturb which can disturb and frighten off animals. [1 mark]
- Travelling by air, sea or land requires large amounts of fossil fuels to be burned, which generates a significant amount of greenhouse gases. [1 mark]
- Services provided by tourism such as air-conditioned accommodation can also contribute to the increase of greenhouse gases which can lead to enhance greenhouse effect. [1 mark]

- Many accommodations in tourist areas may not have the proper sewage system such as wastewater treatment facilities and untreated sewage may be improperly disposed of to the sea, causing water pollution. [1 mark]
- The construction of tourist facilities may encroach on natural areas, destroying natural environments and threatening wildlife habitat. [1 mark]
- Tourism may result in an overuse of natural resources such as water, leading to depletion of natural resources. [1 mark] These may lead to negative environmental impacts such as droughts, which may harm people and terrestrial and aquatic ecosystems. [1 additional mark]

### 3 Cluster 3: Climate

- (a) Study Fig. 3.1 (Insert), which shows global average surface temperature, global average sea level and Northern Hemisphere snow cover from 1850 to 2000.

Using Fig. 3.1, describe the relationship between global average surface temperature, global average sea level and northern hemisphere snow cover. [3]

- Fig. 3.1 shows that an increase in global average surface temperature of  $0.8^{\circ}\text{C}$  from 1850 to 2000 is accompanied by a decline in Northern Hemisphere snow cover of 2 million  $\text{km}^2$  from 1920 - 2000
- When global average surface temperature increases by  $0.8^{\circ}\text{C}$ , a corresponding increase in global average sea level by about 190mm from 1870 to 2000.
- When Northern Hemisphere snow cover decreases by about 2 million  $\text{km}^2$  from 1920 – 2000, global average sea level increases by about 190mm from 1870 – 2000.

- (b) Explain why temperature differs between tropical equatorial climate and cool temperate climate. [3]

- Due to the Earth's spherical shape, solar angle, which is the angle that the sun's rays strike the Earth's surface, varies at different parts of the earth.
- As areas experiencing tropical equatorial climate are nearer the equator, the solar angle is larger and the sun's rays are more concentrated, resulting in higher / warmer temperatures.
- Whereas areas with cool temperate climate are at a higher latitude with a smaller solar angle where the solar radiation is less direct, and the sun's rays are spread over a larger area and is less concentrated, leading to lower temperatures.

- (c) 'The largest cause of climate change is deforestation.' How far do you agree with this statement? Support your answer with examples.

Level	Marks	Descriptors
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3	7-9	<ul style="list-style-type: none"> <li>• Develops arguments that support both sides of the discussion clearly using a range of points with good elaboration. (For and against the statement).</li> <li>• Examples (must include locations) used demonstrate comprehensive understanding of the issue or phenomenon.</li> <li>• Evaluation is derived from a well-reasoned consideration (based on at least 1 criteria) of the arguments.</li> </ul> <p>Examples of criteria:  Time- Long term vs short term impact/influence  Scale- Area extent, geographical scale (local, national, regional, global)  Inter-relationship between factors/impact</p>
2	4-6	<ul style="list-style-type: none"> <li>• Develops arguments that support one side of the discussion well using one or two points with some elaboration.</li> <li>• Example(s) used demonstrate a good understanding of the issue or phenomenon.</li> <li>• Evaluation is well supported by arguments.</li> </ul>
1	1-3	<ul style="list-style-type: none"> <li>• Arguments are unclear with limited description or may be listed.</li> <li>• No examples provided or examples are generic, demonstrating a basic understanding of the issue or phenomenon.</li> <li>• Evaluation is simple, missing or unclear.</li> </ul>
0	0	No creditworthy response

**Suggested answer:**

I agree with the statement to a large extent. Large-scale deforestation can contribute vastly to climate change as many activities require clearance of large areas of forest although the burning of fossil fuels and urbanisation can cause climate change as well.

Large-scale deforestation which involves removal of forests is due to the need for resources and land. Resources such as timber and wood is used to produce paper and building materials for industrialisation. Forests are cleared for land due to the need for urban development or agricultural needs. Deforestation results in increased levels of carbon dioxide as it reduces the number of trees that absorb carbon dioxide through photosynthesis. During photosynthesis, trees store carbon, thus when trees are cut down or burned, the stored carbon is released back into the atmosphere as carbon dioxide. Clearing of trees also exposes soil to sunlight. This increases the soil temperature and the rate of carbon oxidation.

For example, globally, tropical deforestation contributes to about 20% of annual greenhouse gas emissions. With more greenhouse gases in the atmosphere, there is enhanced greenhouse effect and global temperatures increase, resulting in climate change.

However, the burning of fossil fuels has contributed to climate change as well. Fossil fuels have high carbon content. The burning of fossil fuels such as coal, oil and natural gas produces large amounts of carbon dioxide and other greenhouse gases which contributes to the enhanced greenhouse effect. The use of fossil fuels increased steeply since the start of the industrial revolution in the 1880s, contributing to more than 35 billion tonnes of carbon dioxide emissions per year.

In cities, fossil fuels are burned to power the high concentration of vehicles as well as household activities such as heating, cooking and lightings. Cities consume about 78% of the world's energy and contribute significantly to the emission of greenhouse gases which will lead to climate change.

#### Evaluation

In conclusion, I agree with the statement to a large extent as deforestation is a means for other causes such as agriculture and urbanisation that contribute to climate change. Large areas of forests are removed due to the needs of people which include burning of fossil fuels and urbanisation. As such the changing land use will require deforestation which is a main cause of climate change.

End of paper





**NAN HUA HIGH SCHOOL**  
**Preliminary Examination**

CANDIDATE  
 NAME

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INDEX  
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**GEOGRAPHY**  
 Paper 2

**2279/02**  
**29 August 2025**

**1 hour 45 minutes**

Candidates answer on the Question Paper.  
 Additional materials: Insert

**READ THESE INSTRUCTIONS FIRST**

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

Write your answers on the lines provided for each question.

Write in dark blue or black pen. You may use a pencil for any diagrams or graphs.

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

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 mark for this paper is **50**.

**1 Cluster 1: Geography in Everyday Life**

- (a) Study Fig. 1.1 (Insert), which shows a map of Bidadari Park with a 5.2 kilometres network of trails running through greenery. It also features a 1.8-hectare lake, which serves both recreational and flood-management purposes.

Using Fig.1.1, explain how Bidadari Park provides regulating and cultural ecosystem services. [5]

Award 1 mark for each explanation of how Bidadari Park provides ecosystem services, up to a maximum of 5 marks.

- The creek leading to Alkaff Lake can take the excess rainwater to the lake. This can regulate water flow and prevent flood.
- The footpath at Alkaff Lake can also help to prevent flood as it is able to be flooded up to 4m during times of intense rainfall and water levels rising.
- Vegetation in the park or around the lake or pathways can reduce surface runoff by retaining water in the soil and regulate water flows.
- The trees and plants in the park help with regulating air quality by removing pollutants from the atmosphere through photosynthesis.
- The Adventure Playwoods may also be a place for children to play and engage in recreational activities.
- Park users who frequent the place may find it relaxing / stress-relieving with activities such as jogging or walking. These activities may improve their physical and mental health.  
The activities may also foster social belonging and group identity, strengthening their sense of place. [1 additional mark]

- (b) Study Figs. 1.2 and 1.3 (Insert), which shows how parts of Commonwealth Drive will be changed as part of the redevelopment for Tanglin Halt.

Tanglin Halt, located in Queenstown, was among Singapore's earliest Housing and Development Board (HDB) estates, established in the 1960s. In 2014, it was announced that the estate would undergo redevelopment under the Selective En-bloc Redevelopment Scheme (SERS), aiming to rejuvenate ageing housing stock and optimise land use.

Residents will be relocated to another housing estate as demolition takes place. Part of Commonwealth Drive will also be realigned, and the existing road will be turned into a pedestrian-friendly zone with cycling lanes and footpaths.

Using Figs. 1.2 and 1.3 (Insert), evaluate how the redevelopment for Tanglin Halt affects residents' quality of life. [6]

Award 1 mark for each evaluation of how redevelopment affects residents, to a maximum of 6 marks.

Award a maximum of 1 mark for further development of each evaluation, where applicable.

**Positive Aspects:**

- Residents are offered new flats with modern amenities, enhancing their quality of life. [1 mark]
- There will be enhanced infrastructure. The redevelopment includes better connectivity, new community spaces, and improved facilities, fostering a more vibrant neighbourhood. [1 mark]
- The links between the MRT and the trail corridor offer better access for residents. [1 mark]
- With new cycling paths and pedestrian footpaths, residents can build bonds with each other through recreational activities. [1 mark] These areas can also provide spaces for residents to exercise. [1 additional mark]

**Negative Aspects:**

- Long-time residents may experience a loss of memories or heritage to Tanglin Halt as they may have a deep attachment to the estate. The demolition signifies a loss of personal and collective memories. [1 mark]
- The close-knit community bonds formed over decades are disrupted, leading to feelings of displacement and nostalgia among residents. [1 mark]
- Roads may be less accessible to cars as Commonwealth Drive is made more pedestrian-friendly. [1 mark]

(c) Explain how environmental stewardship can be practised. [4]

Award 1 mark for each explanation of how environmental stewardship can be practised.

Award a maximum of 1 mark for further development of each explanation.

- Environmental stewardship can be practised through promoting volunteerism among neighbourhood residents to share knowledge with others about the importance of healthy ecosystems. [1 mark]
- This helps residents become more aware of what they can and should do to responsibly use and protect the natural environment. [1 additional mark]
- Environmental stewardship efforts can also be practised through partnership of public and private sectors.

- Different stakeholders may have different perspectives, resources and expertise to enhance environmental stewardship efforts. [1 additional mark]

## 2. Cluster 4: Tectonics

- (a) Using an example, explain what happens at transform plate boundaries. [4]

Award 1 mark for each explanation of what happens at transform plate boundaries with a named example.

Award a maximum of 1 mark for further development of each explanation, where applicable.

When there is no named example, a maximum of 2 marks is given.

- When the Pacific Plate slides past the North American Plate (1 mark)
- Friction causes the two plates to be locked, and stress builds up. (1 mark)
- Stress caused by the plate movement produces a fault, which is a zone of fractures. The fault is called the San Andreas Fault in this example. (1 mark)
- Earthquakes occur here as one plate suddenly slips past another. (1 mark) This is due to the release of seismic energy / waves. (1 additional mark)

- (b) (i) Study Fig. 2.1 (Insert), which shows a map of shake intensity from the earthquake and aftershocks that happened in Turkey, 2023.

Using Fig. 2.1, describe the distribution of shaking in Turkey. [3]

Award 1 mark for each description of distribution of shaking of the earthquake.

- The highest / most severe and very strong shake intensity areas are in the areas where the first quake and a major aftershock / aftershocks occurred / Gaziantep.
- The strong shake intensity spreads outwards from Gaziantep and the areas of aftershocks in the Northeast and Southwest direction / towards Adana / Aleppo
- The moderate shake intensity can be in areas such as Adana and Aleppo.

- The light shake intensity spreads outwards all the way to Damascus in Syria, parts of Iraq, and other parts of Turkey.

- (b) (ii)** Study Fig. 2.2 (Insert), which shows comparison of the earthquake in Turkey in 2023 to an earthquake in Peru in 2021.

With reference to Fig. 2.2, compare the factors that affected the impact of the earthquakes in the two countries. [5]

Award 1 mark for each comparison of the factor that affected the impact of the earthquakes.

Award a maximum of 1 additional mark for further development of each comparison, where applicable.

- The earthquake in Turkey had a shallow focus of 17.9km which meant that the vibrations were felt stronger whereas the earthquake in Peru had a deeper focus of 112km which allowed the vibrations to be absorbed by the rocks before reaching the surface. [1 mark]
- Turkey's earthquake occurred in an area of high population density hence there were many deaths while Peru's earthquake occurred in an area of sparse population density which means fewer people were living in the region hence lower number of casualties. [1 mark]
- The geology in Turkey is made of soft sediments which means that the rocks could not absorb the vibrations of the earthquake well, giving rise to more vigorous shaking while the geology in Peru was dense bedrock which could absorb the vibrations better, leading to less violent shaking. [1 mark]
- More infrastructure was damaged in Turkey compared to Peru due to the different levels of urbanisation. [1 mark]
- There were also many unreinforced buildings in Turkey which resulted in many buildings collapsing, causing high casualty rate while in Peru, the area was forested which means there is likely to be few buildings. [1 mark]
- The magnitude of Turkey's earthquake is higher at 7.8 on the Richter Scale while Peru's earthquake is slightly lower at 7.5 on the Richter Scale. Turkey also experienced a second earthquake of a high magnitude at 7.5 on the Richter scale. [1 mark]

- (c)** Explain how disaster management strategies could help people of the affected areas after a volcanic eruption. [3]

Award 1 mark for each explanation of how disaster management strategies could help people of affected areas.

Award a maximum of 1 additional mark for further development of each comparison, where applicable.

- Search and rescue efforts involve finding and saving survivors trapped in disaster zones. Their aim is to rescue as many people as possible in the shortest time with minimal risk to rescuers. [1 mark] Without search and rescue, the survivors could die from injuries, crush syndrome, dehydration, burns or other conditions. [1 additional mark]
- Timely evacuation involves moving people away from areas at risk of hazards as quickly as possible to safer locations to reduce loss of lives.
- People need to be evacuated from danger zone around the volcano as lava flows or tephra can cause loss of lives. [1 mark]
- People need to be evacuated as basic services such as food, water, medical supplies could be disrupted. They will need to go to temporary shelters. [1 mark]
- Providing clean water can prevent dehydration or water-borne diseases, which may occur when affected communities drink from contaminated sources of water. [1 mark]
- Providing food can prevent hunger and starvation. [1 mark]
- Providing access to medication, doctors and hospitals can prevent the spread of diseases and save the lives of the injured. [1 mark]
- Experiencing a disaster can result in great emotional distress due to severe injuries, the loss of family members and friends, homelessness or the loss of livelihoods. [1 mark]
- Providing psychological services helps survivors cope with psychological trauma which can last for a long time after the disaster. [1 mark]

3. **Cluster 5: Singapore**

(a) Describe two challenges that Singapore might face due to climate change. [4]

Award 1 mark for each description of a challenge that Singapore might face due to climate change, up to a maximum of 4 marks.

Award a maximum of 1 additional mark for further development of each description.

- As a low-lying island with 30% of its land being less than five metres above sea level, Singapore can be impacted by rising sea levels. [1 mark] With sea level rise, more areas in Singapore could be flooded easily, especially during seasons of intense rainfall. [1 additional mark]
- Singapore could face the challenge of more intense rainfall due to climate change. This could result in flash floods as Singapore's drainage system may not be able to cope. [1 mark]
- The urban heat island effect which is caused by the replacement of Singapore's natural cover with buildings, roads and pavements could see an increase in surface temperatures. [1 mark] This is due to surfaces absorbing more heat due to climate change. Air-conditioning systems, cars and factories also emit heat and raise surface temperatures. [1 additional mark] High humidity levels worsen the situation as perspiration from people evaporates less easily, increasing people's vulnerability to heat exhaustion and heat stroke. [1 additional mark]
- Many vector-borne diseases such as dengue fever could be more widespread as warmer temperatures could shorten egg incubation, resulting in larger Aedes mosquito population. [1 mark]
- Biodiversity of Singapore could be threatened as with warmer and drier environments, habitats could be severely harmed. [1 mark]
- Singapore's food security could be under threat as Singapore imports more than 90% of our food. [1 mark]
- Water insecurity could arise due to climate change. As Singapore does not have natural water sources, extended periods of drought across the world could affected the reliability of Singapore's water supply. [1 mark]

- (b)** Study Fig. 3.1 (Insert), which shows information on the proposed Long Island project at East Coast to help Singapore manage climate change.

Using Fig. 3.1, explain how the proposed Long Island project will help Singapore manage the threat of climate change. [3]

Award 1 mark for each explanation of how proposed Long Island project will help Singapore manage the threat of climate change.  
Award a maximum of 1 additional mark for further development of each explanation.

- The creation of a water body could help to prevent floods inland brought about by sea level rise as sea water will be trapped in it. [1 mark]
- Low-lying coastal areas may also be flooded due to sea level rise especially at East Coast Park. The reclamation bund to be built at higher levels will protect our infrastructure. [1 mark] It can also prevent seawater from mixing with fresh water which can affect our water supply. [1 additional mark]
- The new reservoir that can meet our needs in water supply as it stores fresh water from intense rainfall due to climate change. [1 mark]

- (c)** Describe the trend of Singapore's birth rate and proportion of population aged 65 and above. [4]

Award 1 mark for each description of the trend of birth rate or proportion of population aged 65 years and above, to a maximum of 4 marks.

- Birth rate has been decreasing from about 13.7 per 1000 in 2000 to 8 per 1000 in 2025.
- There was a rapid decrease from 2000 from 13.8 per 1000 to 9 per 1000 in 2009.
- The lowest birth rate was in 2024 where it was about 5 per 1000.
- The proportion of population aged 65 and above has been increasing from about 4% in 2000 to 18% of the population in 2025.
- There was a rapid increase from 2010 onwards from 9% to 18% in 15 years.

- (d) “Building Singapore’s economic resilience is more important than building its social resilience.”  
How far do you agree with this statement? Explain your answer. [9]

Relevant Content

- Economic resilience efforts
- Social resilience efforts

A possible approach

I disagree with the statement as building both economic resilience and social resilience are equally important to achieving sustainable developing in Singapore.

Singapore is an attractive location for MNCs and start-ups. Building economic resilience ensures that Singapore continues to be attractive as a competitive economy that can cope with global economic uncertainties. Singapore’s main efforts are focused on deepening and diversifying international connections. Singapore’s linkages with overseas partners would create business opportunities in new markets. For example, the Economic Development Board (EDB), Enterprise Singapore (ES) and Global Innovation Alliance (GIA) connect Singapore companies with overseas partners. This ensures that Singapore has diverse international connections, which could strengthen the capabilities of businesses here. Singapore also puts emphasis on strengthening the capabilities of all businesses to innovate and cope with changes. Investments in R & D are aimed at creating new avenues of growth, raising Singapore’s economic competitiveness in the long term. For example, Centre for Quantum Technologies and ST Engineering had come together to develop new AI-enabled cybersecurity tools, which produce encryption codes that are unbreakable. As technology replaces routine tasks, Singaporeans would need to pick up new skills that enable them to be effective in their jobs. For example, universities and polytechnics have launched more than 500 skills-based courses to help Singaporeans learn new skills. This keeps Singapore’s workforce competitive and able to deal with economic changes in the future.

All sectors of society and different groups of people play an integral role in Singapore’s efforts to build social resilience. Singaporeans are encouraged to go beyond achieving basic academic qualifications and continually pick up new skills throughout their lives. For example, the SkillsFuture national movement provides Singaporeans with the opportunity to engage in lifelong learning. The SkillsFuture Work-Study Programme helps Singaporeans pick up skills and gain work experience, combining classroom training with

on-the-job training. The programme guides working adults in starting new careers and also enhances the employability of fresh graduates.

Singapore strengthens its social resilience by mobilising communities in preparedness measures for emergencies. For example, the Total Defence framework aims to engage all Singaporeans in building a strong, secure and cohesive nation. This involves fulfilling National Service duties and volunteering in Civil Defence activities, ensuring that the country remains united in overcoming difficulties.

In Singapore, shared spaces are created to help bring together people from all walks of life, fostering relationships that help to build its social resilience. For example, HDB's pilot initiative 'Build-A-Playground' at Canberra in 2014 was carried out in partnership with the residents. The opportunity to design and build the playground has enhanced the residents' sense of belonging and inclusion. The government regularly invites the community to offer input to its plans, creating a greater sense of ownership among people. This creates an inclusive society with strong social support from different groups of people. For example, the government started the SGFuture Engagement in 2015 to consult people of all ages and backgrounds on their hopes for the future of Singapore. Through this nation-wide public engagement, the community and the government collectively explore different views and ideas to address challenges that may confront Singapore.

Building economic resilience is as important as building social resilience. This is because Singapore needs to constantly improve our business environment and supporting services to attract investments for economic growth. Despite growing global competition, limited resources and physical space, it is important for Singapore to ensure its economy is competitive to bring in investments which will bring about employment opportunities for Singaporeans as industries are set up by overseas companies.

However, building social resilience in Singapore is equally important as society becomes more diverse. Due to the small population that Singapore has, there is an increase in foreign population and new citizens. Hence a strong community spirit is important to enable people to feel included and that they could contribute to Singapore. If a country does not prioritise building its social resilience, tensions and disharmony could divide the country. Only in building both economic and social resilience, could Singapore survive any crisis or challenges.

Level	Marks	Descriptors
3	7-9	<ul style="list-style-type: none"> <li>• Develops arguments that support both sides of the discussion clearly using a range of points with good elaboration.</li> <li>• Examples used demonstrate comprehensive understanding of the issue or phenomenon.</li> <li>• Evaluation is derived from a well-reasoned consideration of the arguments.</li> </ul>
2	4-6	<ul style="list-style-type: none"> <li>• Develops arguments that support one side of the discussion well using one or two points with some elaboration.</li> <li>• Example(s) used demonstrate a good understanding of the issue or phenomenon.</li> <li>• Evaluation is well supported by arguments.</li> </ul>
1	1-3	<ul style="list-style-type: none"> <li>• Arguments are unclear with limited description or may be listed.</li> <li>• No examples provided or examples are generic, demonstrating a basic understanding of the issue or phenomenon.</li> <li>• Evaluation is simple, missing or unclear.</li> </ul>
0	0	No creditworthy response

