

Class:	Register No:	Name:
---------------	---------------------	--------------



CRESCENT GIRLS' SCHOOL
SECONDARY FOUR
PRELIMINARY EXAMINATION 2026

HUMANITIES

2260/02

Paper 2 Geography

25 August 2026

1 hour 45 minutes

Candidates answer on the Question Paper.

Additional Materials: Insert

MARK SCHEME

Section A

Answer Question 1 and Question 2.

1 Cluster 1: Geography in Everyday Life

- (a) Figure 1.1 (Insert) shows an Instagram post on the Ministry of Defence's (MINDEF) account of the community celebrations on National Day in Singapore.
- (i) Using Figure 1.1, describe how such activities can promote a greater sense of place for citizens. [3]

Possible answers:

- [Geographical term] **Significant memorable event**
 - Event of significance at a familiar gathering place.
 - Creation of positive memories for families who attend the NDP celebrations in the community areas.
 - Commemorating a significant event of historic / symbolic significance.
 - Transformation of a location from a space into a memorable place due to the conduct of community events.
- (ii) State another type of media that can be used by residents to express their sense of place. [1]

Possible answers:

- Written texts / Audio clips or recordings / Graphic displays / etc.

- (b) Figure 1.2 (Insert) shows a typical scene in a South East Asian city.

- (i) Using Fig. 1.2, describe one negative consequence of dense vehicular traffic in urban neighbourhoods [2]

Possible answers:

- Dense vehicular traffic lead to **Air pollution hazard**.
- Vehicles produce large amounts of pollution through their exhausts emissions like carbon monoxide, carbon dioxide, etc.
- Dense vehicular traffic in urban neighbourhoods lead to an increase in the concentration of exhaust emissions produced and worsening the air pollution hazard.

- (ii) Explain how cities can alleviate the consequences in (i) through enhancing Regulating Ecosystem Services. [2]

Possible answers:

- Enhancing regulating ecosystem services can be achieved by planting more plants and trees in parks.
 - The trees or other plants will help regulate air quality by removing pollutants like CO₂.
- (c) A group of students wanted to study how pervasive were senior friendly amenities were used in HDB estates. They surveyed 200 seniors across 3 residential estates across 2 months. They came up with the following hypothesis to test:

‘Seniors appreciate the senior friendly amenities in their estates.’

Fig. 1.3 (Insert) shows the questions in the questionnaire survey used.

Fig. 1.4 (Insert) shows the data collected from their survey.

- (i) Using Fig. 1.3, evaluate the effectiveness of the questions used in the questionnaire to gather data for testing the hypothesis. [3]

Possible answers:

- [Effective] Question 3 and 4 deal directly with the effectiveness of the presence of senior friendly amenities allowing the data collected to verify the hypothesis.
- [Effective] Closed ended questions used to collect quantitative data that is ideal to test and verify hypothesis.
- [Not Effective] All 4 questions missing options for other answers. This may lead to a loss of additional details that respondents may have to enrich the data.
- [Not Effective] The lack of open-ended questions also lead to a loss of additional details and examples that the respondents may have.

- (ii) Using Fig. 1.4, evaluate the success of the senior-friendly inclusive features. [3]

Possible answers:

- The data collected from Question 1 and Question 3 shows that the intensity of use and mobility support provided by the senior-friendly inclusive features are successful.
- 85% of the surveyed responded positively that they have used the senior-friendly inclusive features regularly (several times a month or more).
- 85% of the surveyed responded that the senior-friendly inclusive features made mobility easier.

[Total: 14]

2 Cluster 2: Tourism

- (a) Study Fig. 2.1 which shows the international tourist arrivals in Singapore from 1970 to 2010 from China, Indonesia, Australia, Japan and other countries including Malaysia.

Award 1m for each accurately completed graph for China and Japan.
Graphs should be plotted accurately with the appropriate symbols.

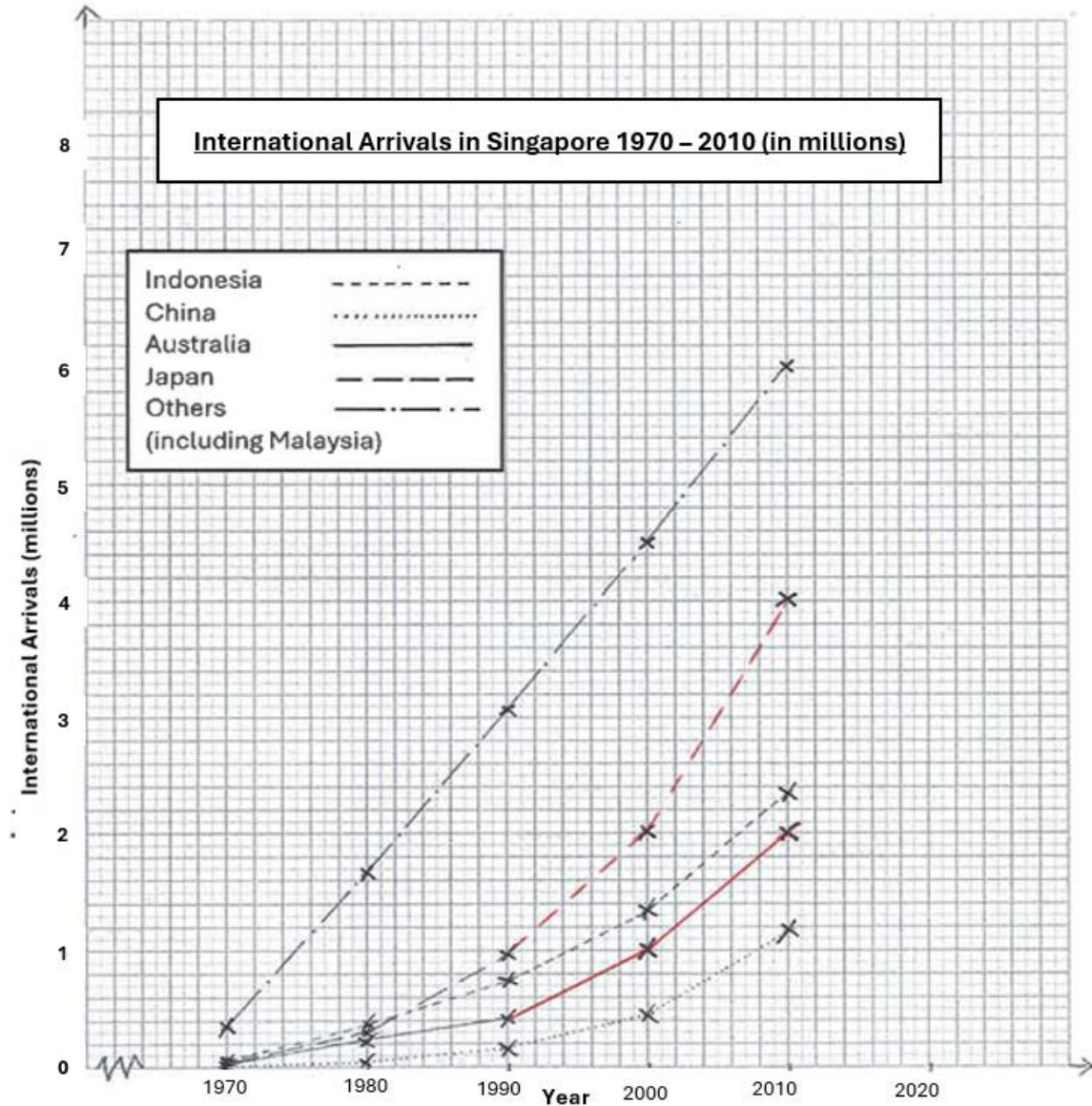


Fig. 2.1

International Arrivals in Singapore 1970 – 2010 (in millions)

Nationality / Year	1970	1980	1990	2000	2010
Indonesia	0.05	0.35	0.72	1.31	2.31
China	0.002	0.01	0.15	0.43	1.17
Australia	0.06	0.22	0.41	1	2
Japan	0.04	0.29	0.97	2	4
Others (including Malaysia)	0.37	1.69	3.07	4.51	6

Fig. 2.2

(ii) Describe the trend of Chinese tourist arrivals shown in Fig. 2.1. [2]

Possible Answer:

- [Overall trend] Chinese international arrivals in Singapore increased from 1970 to 2010.
- The increase was by 1.168 million tourists, from 0.002 million in 1970 to 1.17 million in 2010.
- There was a slow increase between 1970 to 1990 but it more than doubled from 1990 to 2000 and doubled again from 2000 to 2010.

(iii) Account for the trend of Chinese arrivals from 1970 to 2010. [3]

Possible Answer:

- There was a **rapid growth and development** in the Chinese **economy** between 1970 to 1990, this led to an increase in their **ability to afford travel** and hence a rise in international tourist arrivals in Singapore.
- **Disposable income** for the Chinese population increased due to the large number of them **becoming employed** in different occupations. This fueled an **increase in demand** for regional tourism and causing a rise in international tourist arrivals in Singapore.
- The continued **growth of the Chinese economy** to the 2010s led to the large increase in tourists to the region since 1990. With the **increase in profits**, many Chinese people were now able to afford international travel, hence causing a rise in international tourist arrivals in Singapore.
- Accept other logical answers that may cover motivation / mobility / ability factors that lead to a rise in tourist demands.

(b) Explain how business innovations like alternative accommodations help grow international tourism. [2]

Possible Answer:

- With the increase in variety of accommodation types from rented properties to hotels and bed and breakfast stays, accommodation costs have fallen.
- Businesses like AirBnB allow property owners to rent their properties out to tourists at different prices, catering to a range of different budgets and lowering costs. This makes the overall costs of travelling lower and grows international tourism.

(c) Suggest what a tourist destination can do to avoid moving to a stage of decline after it reaches stagnation stage. [3]

Possible Answer:

- [Suggestion] The local authorities can embark on renovation of current facilities and attractions.
- [Additional expansion] With funding from private or government sources, existing facilities that are run down and in states of disrepair can be demolished, rebuilt or refurbished to a proper state to continue attracting new visitors.
- [Suggestion] Identify a new target group and rebranding the destination to attract the newly identified group of tourists.
- [Additional expansion] Destinations can re-market themselves to target different groups of travellers like niche groups (cyclists / hikers / muslim-friendly/ etc). This would enable them to attract new visitors who previously have not visited and increase the tourism numbers and rejuvenate the destination.
- [Suggestion] Building of new attractions like leisure resort developments or theme parks.
- [Additional expansion] Destinations can work with international brands to build and open new attractions like Universal Studios or Disneyland to attract a different tourist crowd that may not have considered the destination in the past.

- (d) Study Fig. 2.3 (Insert) which shows an advertisement by a tour agency for a tour of Mongolia.
- (i) Using Fig. 2.3 (Insert), describe how a Dependable tourist would find this tour appealing. [3]

Possible Answer:

- [Point] Dependables prefer to be guided by authority figures for an authentic experience. This is evidenced as advertised “Unleash your inner explorer” and “Encounter Eagle Hunters”,
- [Point] Dependables prefer conveniences like comforts of modern life in the tour. This is shown in the advertisement “5 star hotels” and “Modern Amenities”.
- [Point] “Safari 4X4 Expeditions” cater to the Dependable’s need for safety and comfort in group travel, providing structure and routine.

- (ii) Explain some negative impacts that the development in Fig. 2.3 (Insert) may bring to the locals. [3]

Possible Answer:

- [Impact] There may be economic leakages as a result of the tourism development. The 5 star hotels may be of international brands.
- [Additional expansion] The international brands will lead to a leakage of the tourism receipts back to the country of origin, leaving less economic benefit for the locals.
- [Impact] Commodification of culture may result as tourists demands take a more important role over traditional practices.
- [Additional expansion] The tourists may request portions of the culture that is presented to be magnified or reduced due to preferences, as they are paying. The locals may accede and lose part of their culture in the long run.
- [Impact] Pollution of the environment by tourist who litter and by the increased transportation emissions.
- [Additional expansion] With a rise in numbers of people, the risk of more litter is very real. Tourist numbers increasing will also lead to a greater demand for transportation service and consequentially more pollution from emissions from buses and trains and other vehicles. This will pollute the environment for the locals.
- Accept other logical answers.

[Total: 18]

Section B

Answer Question 3.

3 Cluster 3: Climate

- (a)** Explain how a difference in latitude impacts surface temperature. [4]

Possible Answer:

- Temperatures are lower at higher latitudes and higher at lower latitudes nearer to the equator.
- Due to the Earth's spherical shape, the angle at which the sun's rays strike the Earth's surface (solar angle) varies at different parts of the earth.
- The higher the latitude, the smaller the solar angle and the lower the latitude, the larger the solar angle.
- A smaller solar angle covers a larger area and the solar radiation is less concentrated, hence, the temperature is lower. A larger solar angle covers a smaller area and the solar radiation is more concentrated, hence the temperature is higher.

- (b)** Study Fig. 3.1 (Insert) shows the climate data and climograph of New Dehli, India.

Using Fig. 3.1, (Insert) describe the rainfall trend of New Dehli, India. [2]

Possible Answer:

- New Dehli has the rainfall pattern of a tropical monsoon climate with a distinct wet and dry season.
- The wet season is from June to September where rainfall ranges from 88mm to 240mm and a dry season from October to May with rainfall generally below 40mm.

(c) Explain how anthropogenic action leads to coral decline. [3]

Possible Answer:

- Anthropogenic action leads to a **rise in carbon emissions** into the environment.
- Oceans are important carbon sinks due to phytoplanktons which absorb CO₂ when they photosynthesise.
- The increase in the carbon dioxide emissions leads to oceans absorbing large amounts and becoming acidic.
- The carbonic acids dissolve calcium carbonate which is needed by corals in forming their skeleton and hence leads to rapid coral erosion and decline.
- [Example] The Great Barrier Reef has decreased in size by 30% since 1960s due to ocean acidification.

- Anthropogenic action leads to a **rise in global temperatures**.
- Corals are highly fragile ecosystems and vulnerable to coral bleaching when sea temperatures rise.
- Increase in ocean temperature causes algae that lives in corals to leave, turning the corals white.
- Bleached corals are more likely to die.
- [Example] The Great Barrier Reef in Australia was severely affected in 2016 and 2017 with two-thirds of the northern section of the reef turning white.

- (d) 'Anthropogenic factors are not as serious as compared to natural factors in causing climate change as people believe.'

Do you agree with the statement? Explain your answer. [9]

Anthropogenic Factors	
Burning of fossil fuels • 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. • Fossil fuels are burned to create energy for human activities such as agriculture, industries and urbanisation. • EG – The use of fossil fuels increase steeply since the start of the industrial revolution in the 1880s, contributing to more than 35 billion tonnes of carbon dioxide emissions per year.	Changing land use – Agriculture • To create energy for agriculture, large amounts of fossil fuels like coal, oil and natural gas are used and it produces greenhouse gases, leading to enhanced greenhouse effect. • As populations grow, forests are cleared to make space for agriculture to meet the rising demand for food. • This contributes to about 30% of global greenhouse gas emissions annually due to : • Burning of fossil fuels to produce energy for farm machinery. • Nitrogen in chemical fertilisers converting to nitrous oxide. • Livestock rearing and natural decomposition processes that release methane gas. • EG – In paddy fields, decomposition is rapid due to the high amount of moisture in the soil, which contributes 5-20% of total methane emissions.
Changing land use – Urbanisation • To create energy for urbanisation, large amounts of fossil fuels like coal, oil and natural gas are used and it produces greenhouse gases, leading to enhanced greenhouse effect. • In cities, fossil fuels are burned to power the high concentration of vehicles as well as household activities such as heating, cooling and lighting. • As countries develop, more people urbanise and more urban centers are developed to house the growing populations.	Changing land use – Industries • To create energy for industry, large amounts of fossil fuels like coal, oil and natural gas are used and they produce greenhouse gases, leading to enhanced greenhouse effect. • Fossil fuels are burnt to run machinery and other factory processes. • As countries develop, there is greater demand for manufactured products from food to daily necessities to vehicles and modern amenities. This leads to a continuous

• It is estimated that cities consume about 78% of the world's energy and contribute significantly to the emission of greenhouse gases. • EG – China has undergone rapid urbanisation with 80% of its population now living in urban cities as compared to 20% in 1980.	increase in the demand for industrial produce. • At current estimates, industries contribute about 43% of all greenhouse gases annually. • EG – the production of a smartphone releases 100-200 million tonnes of CO₂ annually.
Deforestation • Changing land use for agriculture, industries and urbanisation may involve large scale deforestation which contributes to the enhanced greenhouse effect. • The large-scale removal of forests occur due to the need for resources (for building materials and paper). • Land for urban development and agricultural needs. • Deforestation results in increased levels of carbon dioxide because it reduces the number of trees that absorb carbon dioxide through photosynthesis. • The trees that act as carbon sinks are cut down and burned, the stored carbon is released back into the atmosphere as carbon dioxide. • Clearing of trees also exposes the soil beneath to sunlight, which increases soil temperature and the rate of carbon oxidation. • EG – Globally, tropical deforestation contributes to about 20% of annual greenhouse gas emissions.	

Natural factors	
Sunspots - Higher sunspot activity is linked to higher amounts of solar radiation emitted from the sun. - Sunspots have lower temperatures, hence, the areas surrounding the sunspots radiate more energy. This leads to more solar radiation emitted from the sun, resulting in higher temperatures on Earth. - Generally, periods of maximum sunspot activity correspond to periods of higher annual surface temperatures on Earth. - The number of sunspots rises and falls in a cycle of about 11 years. - However there were periods such as between 2000 and 2008 when solar radiation decreased but Earth's temperature continue to increase.	Large-scale volcanic eruptions. - A volcanic eruption releases large volume of carbon dioxide, water vapour, sulfur dioxide, dust and ash, that spread around the lower atmosphere area of Earth. - These particles absorb and reflect solar energy back into space. - This temporarily offsets the greenhouse effect, lowering temperatures until the particles grow large enough and fall down to Earth with gravity. - EG – The volcanic eruption of Mount Pinatubo in 1991 led to a drop in average global temperature of about 0.6°C over 15 months after the eruption.

Level	Marks	Descriptors
3	7-9	- Develops arguments that support both sides of the discussion clearly using a range of points with some elaboration. - Example(s) used demonstrate a comprehensive understanding of the issue or phenomenon. - Examples used show clarity in location, intensity of application. - Evaluation is derived from a well-reasoned consideration of the arguments. - Evaluation is done with common criteria of comparison.
2	4-6	- Develops arguments that support one side of the discussion well using one or two points with some elaboration. - Example(s) used demonstrate a good understanding of the issue or phenomenon. - Examples are named and show either clarity in location or intensity of application. - Evaluation is well-supported by arguments.
1	1-3	- Arguments are unclear with limited description or may be listed. - No examples provided or examples are generic, demonstrating a basic understanding of the issue or phenomenon. - Evaluation is simple, missing or unclear.
0	0	No creditworthy response.

Sample Evaluation Paragraph

Natural factors like Sunspots operate on an 11-year cycle, altering solar radiation levels. However, their long-term impact on modern climate change is minimal. Natural solar cycles cannot account for current accelerating warming trends. In stark contrast, anthropogenic factors exert an overwhelming and continuous impact on the planet. The burning of fossil fuels stands as the most critical contributor, releasing over 35 billion tonnes of carbon dioxide annually into the atmosphere. This massive, sustained influx directly intensifies the enhanced greenhouse effect. Similarly, agriculture is highly severe, accounting for roughly 30% of annual global greenhouse gas emissions. Agriculture drives global warming through widespread deforestation, nitrous oxide release from chemical fertilizers, and methane emissions from livestock and paddy fields. Anthropogenic factors are undeniably the primary and most serious cause of climate change. While sunspots cause minor, cyclical baseline fluctuations, human activities in energy and agriculture inject unprecedented, multi-billion-tonne volumes of greenhouse gases into the atmosphere annually, fundamentally destabilizing the global climate system far beyond any natural occurrences.

[Total: 18]

Copyright Acknowledgements:

Question 1	Fig. 1.1	© https://tinyurl.com/2026-2260gy-prelim-fig1-1
	Fig. 1.2	© https://tinyurl.com/2026-2260gy-prelim-fig1-2
	Fig. 1.3	© https://tinyurl.com/2026-2260gy-prelim-fig1-3
	Fig. 1.4	© https://tinyurl.com/2026-2260gy-prelim-fig1-4
Question 2	Fig. 2.1	© https://tinyurl.com/2026-2260gy-prelim-fig2-1
	Fig. 2.2	© https://tinyurl.com/2026-2260gy-prelim-fig2-2
	Fig. 2.2	© https://tinyurl.com/2026-2260gy-prelim-fig2-3
Question 3	Fig. 3.1	© https://tinyurl.com/2026-2260gy-prelim-fig3-1