

CRESCENT GIRLS' SCHOOL SECONDARY FOUR PRELIMINARY EXAMINATION 2024

1

GEOGRAPHY

Paper 1

2279/01 20 August 2024 1 hour 45 minutes

Candidates answer on the Question Paper. Additional Materials: Insert

Setter: Ms Caroline Chan

Suggested Marking Guide

Geography in Everyday Life Cluster – Geographical Methods

| Question | Answer | Marks |
|----------|--|-------|
| 1(a)(i) | Using Figs. 1.1 and 1.2, suggest why the data collected at the locations may not be reliable. | 2 |
| | Award 1 mark for each suggestion of why the data collected at the locations may not be reliable. Award a maximum of 1 additional mark for further development of each explanation in the form of supporting data evidence from Figs. 1.1 and | |
| | 1.2, where applicable. Cap at 1 mark should no data reference be made from Figs. 1.1 and 1.2. | |
| | Possible responses include: The two data collection locations are both sited at or near the integrated resort of Marina Bay Sands (MBS) only— near the Art Science Museum and Sands Expo Convention Centre. Although MBS is one of the main attractions at Marina Bay, there are other key attractions such as Esplanade and Merlion Park where tourists might visit and there may be tourists who visit Marina Bay but choose not to go to MBS at all. However, data is not collected at these other key attractions. Thus, the data collected at MBS may have a limited scope with inconsistencies / possible variations in data not captured from collecting data at other locations. The data will therefore not be representative of all the study population and not be reliable as a result. OR The two data collection locations are both sited near Bayfront MRT. Although Bayfront MRT is connected to 2 different MRT lines so tourists may travel via public transport nodes in the vicinity, such as Raffles Place MRT and City Hall MRT, where tourists might travel to in order to access Marina Bay and visit locations near these subway/metro stations. However, data is not collected at these other sites. Thus, the data collected at MBS may have a limited scope with inconsistencies / possible variations in data not captured from collecting data at other locations. The data will therefore not be representative of all the study population and not be reliable as a result. | |
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| Question | Answer | Marks |
|----------|---|-------|
| 1(a)(ii) | Suggest how the students could manage one safety risk when collecting data at the locations as shown in Fig. 1.2. | 2 |
| | Award 1 mark for one suggestion of how the students could manage a safety risk when collecting data at the locations as shown in Fig. 1.2, to a maximum of 2 marks. | |
| | Award a maximum of 1 additional mark for further development of each suggestion in the form of supporting data evidence from Fig. 1.2, where applicable. | |
| | Cap at 1 mark should no data reference be made from Fig. 1.2. N.B. Each suggestion should comprise both the cause (identified risk) and effect (mitigation measure) for it to be creditworthy. | |
| | Possible responses include: To mitigate the safety risk of cuts and minor injuries possibly sustained during slips and falls when walking on foot at the outdoor locations near Marina Bay Sands (e.g. near Art Science Museum and Sands Expo Convention Centre), students should wear proper footwear (e.g. closed shoes with flat soles) or take note of potential hazards (e.g. uneven surfaces, steep steps, jagged rocks, wet surfaces) and clothing (e.g. school-approved shirt and bottom for ease of identification). To mitigate the safety risk of sunburn or heat injuries when collecting data under sunny weather at the outdoor locations near Marina Bay Sands (e.g. near Art Science Museum and Sands Expo Convention Centre), students should wear sunblock/sunscreen and/or a hat/cap and hydrate themselves regularly. To mitigate the safety risk of traffic accidents and/or collision with cyclists when collecting data on the pavements/walkways at the outdoor locations near Marina Bay Sands Expo Convention Centre), students should take note of local traffic hazards and road | |
| | crossing procedures / adhere to traffic rules. | |
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| Question | Answer | Marks |
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| 1(b)(i) | Explain why the students may have found non-probability sampling to be a more suitable sampling method than probability sampling when considering time and area as possible limitations during the design of fieldwork. | 2 |
| | Award 1 mark for each explanation of why the students may have found non-probability sampling to be a more suitable sampling method than probability sampling, to a maximum of 2 marks. Award a maximum of 1 additional mark for further development of each | |
| | suggestion where applicable. Cap at 1 mark should there be no comparison between the two sampling methods i.e. explanation is one-sided with focus on only non- probability sampling/probability sampling. | |
| | Possible responses include: If students need to consider time as a limitation when designing fieldwork, they may feel that non-probability sampling is easy to carry out with few rules governing how the samples could be selected, unlike/compared to probability sampling which poses practical constraints in terms of time available and thus more time-consuming. Non-probability sampling involves the non-random selection of samples based on the researcher's conscious decision while probability sampling involves the random and systematic selection of samples so it may be time-consuming. [1 additional mark for further development] If students need to consider access to places/geographical coverage of area as a limitation when designing fieldwork, they may feel that non-probability sampling is more feasible since data samples are taken from those in close range unlike/compared to probability sampling which may be less viable to implement since Marina Bay offers a large study area which the students may find it challenging to cover due to manpower constraints. | |
| | Non-probability sampling is more feasible as it does not need a sampling frame while probability sampling is less feasible for low-frequency fieldwork as it needs a sampling frame (list of population elements) [1 additional mark for further development] | |
| | A01 | |
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| Question | Answer | Marks |
|----------|---|-------|
| 1(b)(ii) | Describe how the students could use quota sampling, based on gender, to select visitors as survey respondents to answer the questionnaire | 2 |
| | Award 1 mark for each description of how the students could use quota sampling, based on gender, to select visitors as survey respondents to answer the questionnaire, to a maximum of 2 marks. Award a maximum of 1 additional mark for further development of each description where applicable. Cap at 1 mark should gender not be used as the criterion to categorise the visitors. | |
| | Possible responses include: The students should divide the population into mutually exclusive categories (sub-populations / strata / subgroup) based on gender as pre-decided. Then they should use non-probability sampling such as convenience sampling to choose the sample and approach these subjectively selected visitors to answer the questionnaire until the target sample size is reached. If the visitors reject to answer the questionnaire, they will go back to their categories and adopt convenience sampling to select another sample till they reach their target pool. | |
| | A01 | |
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| Question | Answer | | | | | | | | | | | Marks |
|---|---|--------------------------------------|--|--------------------------|------------------------------|---------------------------|---------------------------|-----------------------------|-----------------------|----------------------------|------------------------|-------|
| 1(c) Using Figs. 1.1 and 1.2, state two close-ended questions and the pre-defined response options which the students could use for their close-ended questionnaire to test Hypothesis 1, 'Tourists mainly visit Marina Bay to shop.' | | | | | | | | nd the se for urists | 2 | | | |
| | Award 1 mark for stating each pair of question and response options, to a maximum of 2 marks. No marks if the questions are not contextualised based on data reference and/or inference made to Figs. 1.1 and 1.2. | | | | | | | | | | | |
| | Possible responses include: | | | | | | | | | | | |
| | Quest (Choo Optior (d) En | on: W se one s: (a tertainr | hat is option)) Acc nent, (e | your omm) Exe | main odatio ercise/\$ | purpo n, (Sports | ose o b) B s, (f) S | f visit Susine Shoppi | to N ss, ng, (g | /larina (c) [) Othe | Bay? Dining, ers | |
| | Quest purposi Optior times. | on: Ho se whic s: (a) | w many h you io First tin | time dentif ne, (t | s have ied ea b) 1 tir | you v rlier? ne, (c | visited | Marin times | a Bay , (d) ı | for the | e main than 5 | |
| | Quest shopp Optior | on: Ho ng des s: | ow far tination | do y for to | ou ag ourists | inee t in Sii | hat M ngapo | larina re? | Bay | is an | ideal | |
| | Str Ag | ongly ee | Agree | , 1 | Neutr | | Disaç | gree | Stron Disa | ngly gree | | |
| | Quest | on: Ho | w do yo | u rat | e the f | ollowi | ing qu | alities | of Ma | arina B | Bay? | |
| | Quality | Ex | cellent | Abc | ve | Ave | rage | Belo | w | Extre | mely | |
| | Variety shopping facilities | of | | | | | | [|] | C | | |
| | Quality shopping experien | of ce | | | | | | | | | | |
| | Accessi- bility | | | | | | | | | | | |
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| Question | Answer | Marks |
|----------|---|-------|
| 1(c) | Question: Please rank the following shopping attractions in Singapore in order of preference. Options: Kampung Glam (e.g. Arab Street, Haji Lane) Bugis area (e.g. Bugis Street, Bugis Junction) Chinatown (e.g. Chinatown Point, Chinatown Street Market) Jewel and Changi Airport (Terminals 1 to 4) Marina Bay (e.g Marina Bay Sands, Marina Square, Citylink Mall, Suntec City, Millenia Walk, Raffles City Shopping Centre) Orchard Road (e.g. Orchard Ion, Paragon, Wisma Atria, 313@Somerset, Ngee Ann City) | |
| 4(4)(;) | Light Table 1.1. complete the bay graph of shown on Fig. 1.2 | |
| | Award 1 mark for accurate plotting <u>and</u> shading of each trio of vertical bars, to a maximum of 2 marks. Cap at 1 mark for lack of adherence to legend i.e. inaccurate or no shading / should the bars not be of equal width (O.5cm per bar). N.B. In crediting the marks, the trio of vertical bars need not correspond to each data set i.e. it can be any 3 vertical bars correctly plotted and suitably shaded by adopting the legend. | |
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| Question | Answer | Marks |
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| 1(d)(ii) | Using Fig. 1.3, evaluate how well the data supports Hypothesis 1: 'Tourists mainly visit Marina Bay to shop.' | 3 |
| | Award 1 mark for an evaluation on how well the data supports the hypothesis. | |
| | Award a maximum of 1 additional mark for further development of the evaluation in the form of supporting data evidence from Fig. 1., where applicable. | |
| | Possible responses include: [Evaluative statement/Conclusion] The data <u>supports the hypothesis (Hypothesis 1) that tourists mainly come to Marina Bay to shop</u>. [Supporting data evidence] Fig. 1.3 clearly shows that in June, shopping is the top or main reason for tourists visiting Marina Bay, with 150 visitors (30%) opting for it. | |
| | [Evaluative statement/Conclusion] However, the data <u>does not</u> support the hypothesis (Hypothesis 1) as there is an anomaly present | |
| | [Supporting data evidence]. Fig. 1.3 also shows that for September, entertainment overtook shopping as the top or main reason with 200 tourists (40%) onting for it as the main | |
| | reason for visiting Marina Bay. AO3 | |
| | | |
| | the two missing data points and drawing a line of best fit to show the relationship between the two variables. Award 1 mark for accurate plotting of the 2 missing data points on Fig. 1.4. No marks for 1 or more plotting errors. Award 1 mark for a suitable straight line of best-fit drawn on Fig. 1.4 to shown the relationship between the two variables. N.B The line of best-fit should be drawn in such a way that it connects most of the scatter points or the majority of the scatter points are equidistant from it. | 2 |
| | Relationship between distance travelled by tourists to Singapore and their length of stay | |
| | 14 Image: Constraint of the second | |
| | ບ 2000 4000 6000 8000 10000 12000 14000 16000 Distance travelled by tourists to Singapore (km) | |
| | A02 | |

| Question | Answer | Marks |
|----------|--|-------|
| 1(f)(ii) | Using Fig. 1.4, what conclusions can the students draw about Hypothesis 2: 'There is a positive correlation between distance travelled by tourists to Singapore and their length of stay in Singapore.'? | 3 |
| | Award 1 mark for each conclusion (reasoned inference) about the hypothesis to a maximum of 2 marks. Award a maximum of 1 additional mark for further development of the evaluation in the form of supporting data evidence from Fig. 1.4, where applicable, to a maximum of 2 marks. N.B. Acceptable if response only focuses on one side i.e. hypothesis is valid, and backed by two contrasting pieces of supporting data evidence. | |
| | Possible responses include: [Evaluative statement/Conclusion] Hypothesis 2 is valid that there is a positive correlation between distance travelled by tourists to Singapore and their length of stay in Singapore. [Supporting data evidence] Fig. 1.4 shows that the tourists who travel a long distance of between 13000-15000km to Singapore end up having the longest length of stay ranging from 10-12 days. [Supporting data evidence] Fig. 1.4 shows that the tourists who travel the shortest distance of between less than 2000km to Singapore engage in the shortest length of stay ranging from 2-4 days. [Evaluative statement/Conclusion] Hypothesis 2 is not entirely valid as there are a few anomalies present in Fig. 1.4. [1 mark] [Supporting data evidence]. E.g. A visitor travelled a shorter distance of 3000km to Singapore but ended up staying for 12 days while a visitor travelled a longer distance of 12000km to Singapore and experienced a shorter length of stay of 7 days. | |
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Tourism Cluster

| Question | Answer | Marks |
|----------|--|-------|
| 2(a) | Using Fig. 2.1, compare the patterns shown by the international visitors to Japan between the two tourist generating countries of South Korea and China from May 2019 to May 2024. | 3 |
| | Award 1 mark for each comparison of the patterns shown by the international visitors to Japan between the two tourist generating countries of South Korea and China from May 2019 to May 2024, to a maximum of 3 marks. | |
| | explanation in the form of supporting data evidence from Fig. 2.1 where applicable. Cap at 2 marks should comparisons be one-sided i.e. focussing only on | |
| | similarities/differences. Cap at 2 marks should no supporting data reference be made (Note: data should be processed). Cap at 1 mark for overall response should no comparisons be made | |
| | Accept other plausible points. | |
| | Possible responses include: [Similarity] From May 2019 to May 2024, there is no change as both South Korea and China remained the top two performers as tourist generating regions / countries (tourism markets) from where visitors travel to Japan. | |
| | [Difference] From May 2019 to May 2024, the number of international tourist arrivals to Japan from South Korea increased such that it eclipsed/surpassed that of China to become the top tourist generating region. | |
| | [Difference] From May 2019 to May 2024, the number of international tourist arrivals to Japan from South Korea has shown an increase while/but that from China has shown a decrease, o increase of 135406 visitors from South Korea versus decrease of 210965 visitors from China | |
| | A02 | |
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| Question | Answer | Marks |
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| 2(b) | With reference to Fig. 2.2, suggest how unforseen events may have led to the fluctuations in international tourist arrivals to Japan in 2011 and 2020. | 4 |
| | Award 1 mark for each suggestion of how unforseen events may have led to the fluctuations in international tourist arrivals to Japan in 2011 and 2020, to a maximum of 4 marks. Award 1 mark for further development of each explanation in the form of a more comprehensive explication or a supporting example, where applicable. No cap on marks should no supporting data reference be made from Fig. 2.2 due to question phrasing for which data response is not needed. Not acceptable: Unfavourable political situations due to the context | |
| | | |
| | Possible responses include: | |
| | Unexpected events | |
| | Natural disasters Natural disasters such as earthquakes, can cause significant damage to tourism infrastructure in tourist destination regions. People fearing for their safety may postpone or cancel their travel plans. Example: In March 2011, Japan experienced a powerful 9.0 magnitude earthquake that resulted in widespread damage of infrastructure in the country. The 2011 Tohoku earthquake also triggered a formidable tsunami with waves up to 40m high, leading to widespread destruction of homes, businesses, roads, railways and other infrastructure along the coast of the Sendai area. More than 450,000 people became homeless. About 18.500 died and 2500 people remain missing. The tsunami also caused the meltdown at 3 reactors at the Fukushima Daiichi Nuclear Power Plant, resulting in a mass evacuation in nearby areas. Due to the earthquake and associated nuclear radioactive scare, there was a decline of about 3.75 million international tourist arrivals to Japan in 2011. | |
| | Economic downturn During an economic downturn, the economies of countries are negatively affected. Due to the slowdown in economic activity, companies would attempt to cut costs to reduce their expenses and maintain profitability. As a result, people may lose their jobs or experience pay cuts, leading to a reduction in disposable income (amount of wages left after deducting the taxes). This results in people choosing not to travel to reduce spending. | |
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| Question | Answer | Marks |
|----------|--|-------|
| 2(b) | • Example: The COVID-19 recession was a global recession caused by the COVID-19 pandemic. After a year of global economic slowdown that saw stagnation of economic growth and consumer activity, the COVID-19 lockdowns and other precautions taken in early 2020 drove the global economy into crisis. Within seven months, every advanced economy had fallen into recession. As a result, tourism was largely affected globally. In 2020 alone, international tourist arrivals to Japan fell sharply to 6.25 million in 2020 and it dipped to an all-time low of 625000 in 2021. | |
| | Outbreak of disease With disease outbreaks, people may postpone or cancel their travel plans out for fear of their own safety and health. They may put off travelling to the affected areas as they do not wish to contract the infectious disease which can cause them and their loved ones to suffer from ill health or even endanger their lives. Governments may choose to close off the affected area or issue travel advisories to discourage travelling to the affected areas to ensure safety, reducing the number of tourist arrivals. Example: The COVID-19 pandemic which started in late 2019 infected over 250 million people and caused over 4 million deaths. Many countries responded by going into 'lockdown', causing international travel to shut down. In 2020 alone, international tourist arrivals to Japan fell sharply to 6.25 million in 2020 and it dipped to an all-time low of 625000 in 2021. | |



| Question | Answer | | | | |
|----------|--|---|--|--|--|
| 2(d) | With reference to Fig. 2.5, suggest how tourists can play their part as a consumer and stakeholder in influencing sustainable tourism development. | 4 | | | |
| | Award 1 mark for each suggestion of how tourists can play their part as a consumer and stakeholder in influencing sustainable tourism development. | | | | |
| | Award 1 mark for further development of each explanation in the form of a more comprehensive explication or a supporting example, where applicable. Cap at 3 marks should answers be one-sided. | | | | |
| | Fig. 2.3 due to question phrasing for which data response is not needed. | | | | |
| | Possible responses include: | | | | |
| | <u>Tourists as a consumer</u> Tourists can ensure that tourism is consumed responsibly by making responsible choices about where they visit and stay and the resources they use. Tourists can choose to stay in hotel accommodation that embrace sustainability. / Tourists can choose to purchase tour services from tour operators that have a low carbon footprint and actively prioritise local communities when employing staff. / Tourists can make responsible decisions about their use of energy, water and food – for example, switch off the lights and air-conditioning when they are not in the hotel rooms and purchase locally-sourced produce rather than imported ones. [further development] E.g. From Fig. 2.5: Tourists can choose tourism-related "companies that have a commitment to responsible travel and to minimizing their footprint of their offices ad operations." Tourists can develop a genuine interest in the tourist destination and seek to enhance its environment, culture and economy. Tourists can choose tours or services which prioritise sustainable tourism or channel their revenue towards environmental conservation efforts. E.g. Tiger Tops Elephant Camp in Nepal with supporting details (page 62 of Print Textbook) Tourists can also get involved in environmental conservation or community projects that benefit the tourist destination. E.g. Sea turtle volunteering conservation programme in Costa Rica with supporting details (page 62 of Print Textbook) | | | | |
| | Tourists can interact responsibly with the environment and people | | | | |
| | when they travel. | | | | |
| | Tourists can read up on the local practices and cultures and be mindful of their attire or behaviour when travelling as a way to show respect to the local customs and cultures. E.g. Tourists should dress modestly when visiting religious sites in Bali, Indonesia. They can look after the environment when travelling to ensure that they do not litter or vandalise | | | | |
| | AO1 | | | | |
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| Question | Answer | Marks |
|----------|--|-------|
| 3(a) | Using Fig. 3.1 and Fig. 3.2, explain the effect of the monsoon wind on the rainfall pattern experienced by India from June to September. | 2 |
| | Award 1 mark for each explanation of the effect of the monsoon wind on the rainfall pattern experienced by India from June to September, to a maximum of 2 marks. Award a maximum of 1 additional mark for further development of each explanation in the form of supporting data evidence from Figs. 3.1 and 3.2 where applicable. Cap at 1 mark should no supporting data reference be made. Other acceptable data evidence: maximum rainfall of 180mm during wet season, mean amount of rainfall of 131.25mm during wet season Possible responses include: From June to September, the Southwest Monsoon moves over the Indian Ocean and picks up abundant moisture as it blows from Australia towards Central Asia. This brings heavy rain to India as shown by the high total amount of rainfall of 525mm during the wet season from June to September. | |
| | AO2 | |
| 3(b) | Describe the general distribution of coral reefs found in the Great Barrier Reef Marine Park as shown in Fig. 3.3. Award 1 mark for one description of the general distribution of coral reefs found in the Great Barrier Reef Marine Park. No marks should description not be substantiated by data reference from Fig. 3.3. Unacceptable: Coral reefs in the Great Barrier Reef Marine Park are mainly found in Queensland, Australia. Accept other plausible points. | 1 |
| | Possible responses include: Generally, coral reefs found in the Great Barrier Reef Marine Park are mainly distributed in the Coral Sea along the northern and northeastern coast of Queensland, Australia. Generally, coral reefs found in the Great Barrier Reef Marine Park are mainly found in the shallow waters of the sea in a linear pattern parallel to the eastern coast of Queensland, Australia. Generally, coral reefs found in the Great Barrier Reef Marine Park are mainly found in the shallow waters of the sea in a linear pattern parallel to the eastern coast of Queensland, Australia. Generally, coral reefs found in the Great Barrier Reef Marine Park are mainly found in the shallow waters of the sea in a linear pattern that stretches from the northern tip of Queensland near Mission River, spans through Cooktown, Cairns and Mackay, all the way to Rockhampton City. | |
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| Question | Answer | Marks |
|----------|--|-------|
| 3(c) | With reference to Fig. 3.4, <mark>explain</mark> the impact of climate change on natural systems. | 3 |
| | Award 1 mark for each explanation of the impact of climate change on natural systems, to a maximum of 3 marks. Award 1 mark for further development of each explanation in the form of a more comprehensive explication or a supporting example, where applicable. | |
| | Fig. 3.4 due to question phrasing for which data response is not needed. Also acceptable: Impact of climate change on terrestrial and aquatic systems. | |
| | Possible responses include: One impact of climate change on natural systems is increases in atmospheric and ocean surface temperatures. Since the start of the industrial Revolution, the increase in industrial | |
| | activity has led to more greenhouse gas emissions and as a result, Earth's atmospheric temperature has been increasing. Most of the heat trapped by greenhouse gases is absorbed by oceans | |
| | Average temperatures of oceans have been increasing by slightly over 1°C over the last century. | |
| | This increase is uneven, with some parts of the ocean warming faster and some parts remaining cooler. E.g. Climate change has led to more extreme weather occurring in | |
| | the form of tropical cyclones. This has led to larger scale of "cyclone damages" to the coral reef ecosystem. As shown in Fig. 3.4, most parts of the Great Barrier Reef have undergone a proportionate loss of coral cover ranging from 5% to 20% as a result of tropical cyclones. | |
| | E.g. Fig. 3.4 shows that the Great Barrier Reef has been subjected to much heat stress such that most parts of it have undergone a proportionate loss of coral cover ranging from 3% to 25%. | |
| | One impact of climate change on natural systems is changes to ocean circulations. | |
| | Water in the oceans is constantly moving around the world in system known as the global ocean circulation. Climate change is expected to slow down the global ocean circulation. | |
| | Water at the surface gains heat due to rising atmospheric temperatures and becomes less dense. The sinking of water at the poles is thus reduced, which slows down | |
| | the flow of water. E.g. The Ocean current in the Atlantic Ocean has slowed by about 15% | |
| | .g. Fig. 3.4 shows that the Great Barrier Reef has been subjected to much heat stress such that most parts of it have undergone a proportionate loss of coral cover ranging from 3% to 25%. | |
| | One impact of climate change on natural systems is changes in precipitation on land. Climate change is strengthening evicting precipitation patterns. | |
| | Climate change is strengthening existing precipitation patterns as wet regions are expected to get wetter due to increased precipitation. | |

| Question | Answer | Marks |
|----------|---|-------|
| 3(c) | Warmer air results in increased water vapour in the atmosphere, especially in areas where surface water (e.g. rivers, lakes and seasy is present. | |
| | This is due to warmer air being able to hold more water vapour and | |
| | increased evaporation. Hence, precipitation and occurrences of | |
| | excessive rainfall are expected to increase in these areas (e.g. The | |
| | Poles, parts of Southeast Asia such as Singapore and Central Asia) E.g. The increased sea surface temperature in the Indian Ocean | |
| | can lead to immense moisture being picked up by the Southwest | |
| | Monsoon and eventually bring more torrential rain to India and thus, | |
| | even more excessive rainfall during the wet season from June to | |
| | OR | |
| | Climate change is weakening precipitation patterns as dry regions are expected to get drier due to decreased precipitation, leading to | |
| | increased occurrences of drought. | |
| | reduces surface water and dries out soil and evaporation. | |
| | The lack of moisture can reduce rain occurrence. | |
| | For areas with dry climate, the dry seasons therefore get even drier, resulting in droughts | |
| | Droughts are also more likely to occur in such places such as the | |
| | subtropics where most of the world's deserts are located, and mid- | |
| | latitudes, such as Southwest USA and parts of Sahel region in Africa. | |
| | A02 | |
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| Question | Answer | Marks |
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| 3(d) | With climate change being a global challenge, Singapore has taken and accelerated efforts to address climate change and ensure sustainable development. | 9 |
| | Evaluate the effectiveness of the climate action taken by the government and society to build community resilience to climate change in Singapore. | |
| | Relevant content: <u>Mitigation strategies to build community resilience to climate change</u> Mitigation strategies that reduce greenhouse gas emissions (pages 73 to 78) | |
| | International agreements and cooperation (government) Use of low-carbon technologies (government) Use of clean energy sources (government) Changes in consumption patterns (consumer) | |
| | Adaptation strategies to build community resilience to climate change Adaptation strategies involving structural and technological approaches that lessen harm brought by climate change (pages 83 to 85) | |
| | Water and flood management – sea wall, polder, water storage tanks, drains and canals (government) Use of technology to produce food – high-tech vegetable farms, high-tech egg farms, high-tech fish farms (government) | |
| | Adaptation strategies involving social and institutional approaches that lessen harm brought by climate change (pages 86 to 88) Rising awareness and education (government, consumer) National policies (government) Regional policies (government) | |
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| Question | Answer | | Marks |
|----------|--------|-------|--|
| 3(d) | 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. Evaluation is derived from a well-reasoned consideration of the arguments. |
| | 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. Evaluation is well-supported by arguments. Cap at 4-5m for arguments that support both sides of the discussion using one or two points with some elaboration and supported by example(s) which demonstrate a reasonable/appropriate understanding of the issue or phenomenon. |
| | 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 assessment paragraph:

In conclusion, the strategies undertaken by both the government and the society in Singapore can be effective in building climate resilience to climate change, through the reduction of greenhouse gases and/or adaptation to climate change. However, as discussed, both the mitigation and adaptation strategies are not foolproof as each strategy has its limitations. Nonetheless, both the government and society in Singapore are vital stakeholders in taking climate action to address climate change to strive towards a sustainable future. As a developed country with a skilled and educated workforce, the government in Singapore does have access to sufficient reserves, manpower and the authority to plan and enforce domestic policies with follow-up measures that address broad aspects of policy implementation (such as public education, monitoring, passing laws, rules and regulations). Additionally, the Singaporean government is able to engage in diplomacy to collaborate with other countries and international organisations in areas related to climate action on a regional and global scale. With good leadership and by anticipating change and staying relevant, the government is able to work for the good of the society by taking firm climate action and accelerating such efforts to build community resilience to climate change. Although some of the climate action efforts do require the active involvement of the society in Singapore such as the practice of sustainable living to foster a more eco-conscious lifestyle as consumers, the active participation may be short-lived, particularly if there is no mindset shift to sustain the change in lifestyle among the masses. Moreover, some climate action adopted by the society in Singapore in the form of grassroots programmes and ground-up initiatives may end up being ad-hoc activities that are not scaled up and sustained in the long run for long term impact. Therefore, the government still extends a larger scope of influence than the society and thus, generates a wider extent of positive impact when it comes

| to climate action. Henceforth, the government is more effective than the society in taking climate action to build community resilience to climate change in Singapore. |
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| A03 |

Assessment Specification Grid

| Question | Max Mark | Question part | AO1 | AO2 | AO3 |
|----------|----------|---------------|-----|-----|-----|
| 1 | 20 | (a)(i) | | 2 | |
| | | (a)(ii) | | 2 | |
| | | (b)(i) | 2 | | |
| | | (b)(ii) | 2 | | |
| | | (C) | | 2 | |
| | | (d)(i) | | 2 | |
| | | (d)(ii) | | | 3 |
| | | (f)(i) | | 2 | |
| | | (f)(ii) | | | 3 |
| | | Total | 4 | 10 | 6 |
| 2 | 15 | (a) | | 3 | |
| | | (b) | 4 | | |
| | | (C) | | 4 | |
| | | (d) | 4 | | |
| | | Total | 8 | 7 | 0 |
| 3 | 15 | (a) | | 2 | |
| | | (b) | | 1 | |
| | | (C) | 3 | | |
| | | (d) | | | 9 |
| | | Total | 3 | 3 | 9 |

AO1: 4 + 8 + 3 = 15 AO2: 10 + 7 + 3 = 20 AO3: 6 + 0 + 9 = 15

| Assessment Format (with reference to | 3 structured questions. |
|--|--|
| 2279 Geography GCE Ordinary Level | No more than 9 sub-parts per question. |
| Svllabus) | Q1 is on fieldwork. |
| | One 9-mark OEQ in either Q2 or Q3. |
| Recommended Weighting of AO for Sec 4 | AO1: 15% |
| Preliminary Examination (with reference to | AO2: 20% |
| 2279 Geography GCE Ordinary Level | AO3: 15% |
| Syllabus) | |

AO1: Knowledge with Understanding

Candidates should be able to construct responses based on understanding of theories, generalisations, models and concepts. This will be demonstrated by the ability to:

- (a) identify, describe or explain theories, generalisations, models, concepts and methods
- (b) classify environments, events, methods, objects, people, processes and places into categories according to their common features
- (c) explain how events, objects and processes cause changes to environments, people and places.

AO2: Skills and Analysis

Candidates should be able to apply their understanding to break down information into its component parts or to carry out an investigation. This will be demonstrated by the ability to:

- (a) support conclusions using relevant material from information provided
- (b) identify, describe or compare characteristics, relationships, patterns and trends shown in graphs, maps, photographs, diagrams, tables and texts
- (c) compare similarities and differences between environments, events, methods, objects, people, processes and places
- (d) describe or explain how to collect, process, interpret and present quantitative and qualitative data
- (e) adapt methods to manage risks, limitations and achieve investigation objectives.

AO3: Judgement and Decision-Making

Candidates should be able to use defined criteria and standards to evaluate methods, outcomes and proposals. This will be demonstrated by the ability to:

- (a) arrive at an overall evaluation by considering constraints and opportunities in the environment, people's varying needs, attitudes and beliefs, or the importance of sustainable development
- (b) evaluate the reliability and validity of investigation findings.