JC1 H2 Geography MYE (2023)
Mark Scheme

Marking Approaches
(a) **Point marking** is used for marking all sub-parts of the structured question.
   - For point marking, the general rule is that each creditworthy response is awarded one mark. More detailed guidance is provided in the marking guide for each question.
(b) **Generic level descriptors** are used for marking 20-mark essays.
   - Possible approaches are provided for questions marked using generic level descriptors. They provide guidance on how the questions could be approached. The possible approaches provided are neither exhaustive nor should they be treated as model approach to questions.

Section A

Cluster 4 Fieldwork

1 Five students undertook an investigation about whether the needs of the elderly have been met in Ang Mo Kio (AMK) Hub, a suburban shopping mall located in Ang Mo Kio in Singapore.

They came up with a research question "Are the dietary and healthcare needs of the elderly met in AMK Hub?"

They decided to collect the data on a weekday in June at 10am to 12 noon.

They went to the mall directory and counted the number of clinics, health food stores and food establishments. They were unsure of some of the names and did not consider these stores in their total tally. They also stood at the entrance of a few shops to survey any elderly they saw. They surveyed a total of 9 elderly men and 1 elderly woman.

Resource 1 shows the entrance of AMK Hub.
Resource 2 shows the number of clinics, health food stores and food establishments that the students counted.
Resource 3 shows the survey questions that the students used.
Resource 4 shows the survey results.

(a) **Explain 3 strengths of the students' research question.**   [3]

Award 1 mark for each explanation on the strengths of the research question.
Answer must show that students understand these characteristics to qualify for
1 mark. Maximum of 1 mark for each strength.

- Manageable scope because 5 students can investigate 2 variables i.e. dietary needs and healthcare

- Researchable because information about dietary needs and healthcare are easily available in the mall
- Clearly defined in variables and location

AO1

(b) **Explain how the students could minimise the impact of their investigation at the mall.** [5]

Award 1 mark for each explanation on how students could minimise the impact of their investigation, to a maximum of 5 marks. Award a maximum of 1 additional mark for further development of each explanation, where applicable.

- Stand at the side of the entrance so that they do not block the way of pedestrians or affect the business of the shop
- Avoid crowding together when counting shops or surveying people
- Lower noise to a minimum so that they do not disturb shoppers or businesses
- Do not litter
- Do not crowd around the mall directory so that they do not block other people

AO1

(c) **With reference to the preamble, Resources 2 and 3, explain how the students could improve the accuracy and/or reliability of the survey.** [6]

Award 1 mark for each explanation on how students could improve the accuracy and/or reliability of the investigation, to a maximum of 5 marks. Award a maximum of 1 additional mark for further development of each explanation, where applicable.

- Accuracy:
  - Language translation of the survey in case elderly cannot understand the survey and answer inaccurately
  - Students should check the names of the stores to ensure that they do not miss anything out
  - Define some terms in the survey to ensure accuracy of responses

- Reliability:
  - Increase sample size
  - Sampling method should be either quota or stratified to get a good range of elderly across age groups, sex, ethnicity

AO2

(d) Explain how the data collected in the investigation could help answer the students' research question. [6]

Award 1 mark for each explanation on how the data collected can answer the research question, to a maximum of 6 marks. Award a maximum of 1 additional

mark for further development of each explanation, where applicable. A maximum of 3 marks if responses only address one set of data (e.g. establishments).

- Resource 2 shows only 1 clinic for dental services which shows that there is not enough healthcare support for the elderly as it focuses only on one aspect of healthcare.
- Resource 2 shows that there are 20 food establishments and 7 healthfood stores that can cater to the dietary needs of the elderly.
- Good range of food and health food that can possibly cater to a range of ethnicities and dietary requirements for different groups of elderly.
- But in Resource 4, most elderly said that there was nothing suitable for them under "how would you rate the variety of food options for yourself", which shows that their dietary needs are not met.
- A small group says that the food options are too expensive for them, which means that this is inaccessible for them due to cost.
- Most say that the variety of food options is suitable or very suitable which corresponds to the range seen in Resource 2.

AO2

Section B

Cluster 3.1 Cities in a Sustainable Future

2 Resource 5 shows a graph of Global Urban and Rural Population from 1500 to 2050 (projected). Resource 6 shows the Population of Greater Brisbane and Rest of Queensland (1971-2019). Resource 7 shows the Master Plan for Brisbane's Urban Reimaging (1996).

(a) **Cite data to describe changes in urban population as shown in Resource 5.** [3]

Award 1 mark for each description using data from Resource 5 on the changes in urban population, to a maximum of 3 marks.

Possible responses include:

- Urban population has increased from 0 in 1500 to a projected 7 billion 2050.
- From 1750 to 1950, there was a slow / gradual increase in urban population of around 0.6 billion
- From 1950 to 2050, the increase is rapid / sharp, of around 6.4 billion

AO2

(b) **Explain how urban population loss may affect sustainable urban development.** [4]

Award 1 mark for an explanation of how urban population loss may affect sustainable urban development, to a maximum of 4 marks. Award a maximum of 1 additional mark for further development of each explanation, where applicable.

Possible responses include:
- Urban population loss may result in loss of investments due to the decrease in working population, as businesses leave the city and no new investments are attracted in.
    - This affects economic sustainability due to the loss of employment opportunities and rise in poverty levels due to the decline in income
- As a result of the decrease in middle and upper-class population, this may lead to a decline in tax base
    - This affects social sustainability as the reduction in government revenue may result in less investments in the availability of public services and amenities (e.g. healthcare, education), which could lead to more health problems and lower literacy rates.
- As businesses and people migrate out and no new investments come in, this may result in abandoned and derelic buildings
    - This affects social and environmental sustainability as buildings degenerate into a state of disrepair, causing pollution and attracting vandalism and pest infections.
    - Abandoned buildings are also not rent-worhty as they have inferior infrastructure, which requires significant capital to renovate.
- Reduced manpower for policing due to decline in police patrol may cause lower security levels, increasing crime rates
- Decline in population and its accompanying problems as mentioned above may contribute to a pervasive sense of decay, reducing community spirit

AO1

(c) **Compare the population trends between Greater Brisbane and Rest of Queensland as shown in Resource 6.** [4]

Award 1 mark for a comparison of population trends from Resource 6. Award a maximum of 1 additional mark for further development of each comparison, where applicable. Award a maximum of 2 marks if only similarities or differences are provided.

Possible responses include:
- Population increases from 1971-2019 in both Greater Brisbane and Rest of Queensland
    - In both areas, they increase from slightly below 1 million to around 2.5 million
- The increase in the Rest of Queensland was higher than the increase in Greater Brisbane
    - ROQ increased from around 900,000 to 2.58 million, while

Greater Brisbane increased from 1 million to 2.51 million
- From 1971-1979, the population in Rest of Queensland was slightly lower than Greater Brisbane
- From 1979 to 2019, the population in Rest of Queensland was consistently higher than Greater Brisbane

AO2

(d) **With reference to Resource 7, explain the potential impact of urban** [4] **reimaging in Brisbane.**

Award 1 mark for each explanation of the potential impact of urban reimaging on sustainable urban development, to a maximum of 5 marks. Award a maximum of 1 additional mark for further development of each description, where applicable.

- Better employment opportunities and higher GDP as redevelopment of CBD may attract more investments and higher skilled jobs
- Improvements in environment & mental wellbeing due to the development of more green spaces like Botanic Gardens, New Farm Park and Newstead Parks
- Improvements in lifestyle of people due to more recreational areas such as the RNA & New Sports Stadium and the South Bank Urban Leisure and Mixed Use
- Improvements in healthcare aspects (e.g. lower infant mortality rates) and education (e.g. higher literacy rates) with construction of new buildings such as Royal Brisbane hospital and Out Education
- Better living conditions may provide better sanitation and comfort through the redevelopment of residential areas such as Bowen Hills, Newstead and New Farm residential
- However, cost of living may increase due to the rising rents, which could drive out low-income residents and local businesses that are unable to afford them

AO2

(e) **Using examples, explain the tensions between sustainable urban** [5] **development and liveability.**

Award 1 mark for each explanation of the tensions between sustainable urban development and liveability. Award a maximum of 2 additional marks for further development with examples of each explanation, where applicable. Award a maximum of 2 marks in total if no examples are given.

- The pursuit of sustainability may come at a cost of liveability goals as the prioritisation of environmental sustainability may result in the need for people to change their lifestyle and habits.
  - For example, the proposed implementation of an additional 5c charge to plastic bags at major supermarkets in Singapore will help reduce waste and usage of plastics. While this benefits the environment, it may come at the cost of liveability for some due to the higher cost incurred and the 'hassle' of bringing reusable

bags.
- A more liveable society does not necessarily mean a more sustainable one, as the pursuit of liveability focuses on the immediate needs of the present, but may not consider its long term impacts on future generations.
  - Environmentally poor habits and practices such as driving cars, producing too much waste and consuming too much energy are generally not key focuses of liveability agendas.
  - For example, urban reimaging of London Docklands led to the improvements in businesses, residences and new parks to replace the previously abandoned warehouses from the declined docks. While this may help to improve the liveability of London Docklands, it would also result in higher consumption of energy and more burning of fossil fuels.
- Liveability as a policy agenda may therefore provide an opportunity to sidestep some hard behavioural choices, to the direct detriment of sustainable development. This would particularly be the case if liveability is achieved by means that are unsustainable.
  - For example, local environments can be cleaned with harmful chemicals, litter can be sent to landfill rather than recycled, and mobility can be improved through greater car ownership rather than through better public transport.

AO1

Section C

3   **To what extent is it easy to manage waste sustainably in cities?**   [20]

Possible Approaches:

Candidates could approach the question by making a judgement on whether waste is easy to manage cities through a consideration of the different factors that could affect the ease of waste management. Candidates could analyse social, economic and environmental factors that may affect the ease of waste management sustainably at the different stages of waste generation to waste disposal.

Candidates could also approach the question by making a judgement on whether the management of waste is easier for some cities as compared to others. Candidates could analyse the contextual factors that may affect the extent to it is easy to manage waste sustainably, such as the nature of government policies, resources available, and culture / lifestyle of locals in their receptiveness to sustainable waste management policies.

Levels marked using Generic Level Descriptors for 20m H2 essays

AO3

Generic Level Descriptors for H2 Essays

Levels	Marks	Generic Level Descriptors
5	18–20	Evaluation is consistently analytical and coherent. Response is well-supported by relevant material, including the effective use of examples. Response features accurate geographical knowledge and reflects good understanding of the subject content relevant to the question.
4	14–17	Evaluation is analytical and coherent. Response is mostly well-supported by relevant material, including the appropriate use of examples. Response features accurate geographical knowledge and reflects adequate understanding of the subject content relevant to the question.
3	10–13	Evaluation is broadly analytical and generally coherent. Response is moderately well- supported by relevant material, including some appropriate use of examples. Response features accurate geographical knowledge and reflects adequate understanding of the subject content relevant to the question.
2	6–9	Response is largely descriptive with limited analysis and evaluation. Response is partly coherent and may lack clarity in parts. Response is poorly supported by relevant materials, including the limited use of examples. Response features inaccurate geographical knowledge and poor understanding of the subject content relevant to the question.
1	1–5	Response is descriptive with no analysis or evaluation. Response is fragmented and lacks clarity. Response consists of unsupported assertions. Response features largely inaccurate geographical knowledge and a lack of understanding of the subject content relevant to the question.
0	0	No creditworthy response

Note:

- Assessment using generic level descriptors involves qualitative rather than quantitative evaluation. Judgements on the level to be awarded to an answer will be based on the principle of 'best fit' determined by the descriptors within each level.
- As a general guideline, responses deemed to have fulfilled all the descriptors within a level may be awarded the top mark in that level.