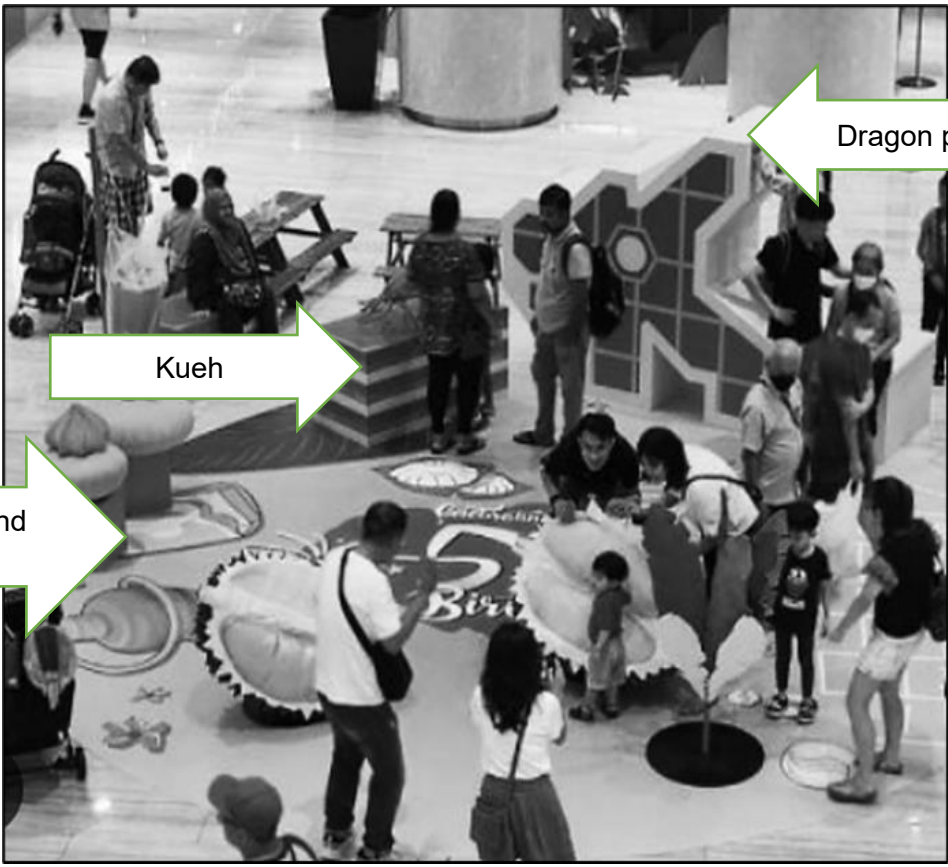


2025 Sec 4 Prelim Elect Geog Answer Scheme

1		Cluster 1: Geography in Everyday Life
	(a)	Study Figs. 1.1 and 1.2, which show various ways National Day is celebrated in a neighbourhood in Singapore. Fig. 1.1 shows a mock-up of the dragon playground and the multi-layered box represents a 'kueh' eaten by Singaporeans and Fig. 1.2 shows flags being displayed in a housing estate in Singapore.
		An exhibition of National Day celebrations in a neighbourhood  Dragon playground Kueh Local biscuits and durian Fig. 1.1

Flags hung in a neighbourhood block of flats



Fig. 1.2

Using information from Figs. 1.1 and 1.2, suggest how the celebrations in a neighbourhood could create a sense of place for the residents. [4]

Fig. 1.1

Gathering places/ Landmarks

- The exhibits in the mall/ common area/ Shopping centre for residents to gather/ meet each other [1] had the opportunity to interact with one another to, this creates friendships/ bonds between people which enhances their sense of place. [1]

Memorable Events

- The displays of the traditional food such as durians are special features/ unique features [1] remind residents of the festivals and creates a sense of identity [1]

Fig. 1.2

Repeated Encounters

- The decoration of the flags on the HDB buildings [1] where residents had repeated encounters with the decorations/ sees it every day they pass by the area [1]
- thus, creating a sense of belonging/ sense of identity/ national pride [1]
- hanging flags as a whole block annually [1]
- Demonstrates pride [1]

Such representations add new layers of meanings to these places by revealing interesting information [1] about them → enhancing our sense of place[1]

		Award 1m for each description of how National Day celebration activities in a neighbourhood can affect the residents’ sense of place, to a max. of 2 marks. Award a max. of 1 additional mark for further development of each description out the acquired sense of place, where applicable. Max. 2m for only describing the acquired sense of place, e.g. ...it creates memories, friendships, forge bonds, etc.																																															
	(b)	Describe, using a located example, regulating ecosystem services that nature provide to the environment. [4] Regulating local climate - Trees in Bishan-AMK park helps to lower surface and air temperature by providing shades to people - On a larger scale, forests can help to cool areas by generating rainfall Regulating water flows - Vegetation cover reduce surface runoff by retaining water in the soil - This is help reduce risk of flooding Regulating local air quality - Trees remove pollutants from the atmosphere, improving air quality. Reserve 1mk for example																																															
	(c)	A group 10 of Punggol Secondary School students were investigating level of satisfaction of the amenities in Punggol town. They decided to conduct their survey on a Saturday at the entrance of Punggol Waterway Park. They divided themselves into two groups where first group did a survey in the morning and second group in the afternoon. The students surveyed a total of 100 people. Level of satisfaction of the amenities in Punggol town <table><tr><th rowspan="2">Facilities</th><th colspan="5">Level of Satisfaction</th></tr><tr><th>Very satisfied</th><th>Somewhat satisfied</th><th>Neither satisfied nor dissatisfied</th><th>Somewhat dissatisfied</th><th>Very dissatisfied</th></tr><tr><td>Waterfront recreational spaces</td><td>40</td><td>35</td><td>14</td><td>11</td><td>0</td></tr><tr><td>Hawker centres</td><td>28</td><td>39</td><td>2</td><td>29</td><td>2</td></tr><tr><td>Transport</td><td>15</td><td>22</td><td>33</td><td>20</td><td>10</td></tr><tr><td>Sustainable Features</td><td>37</td><td>40</td><td>15</td><td>7</td><td>1</td></tr><tr><td>Retail Shops</td><td>25</td><td>42</td><td>6</td><td>18</td><td>9</td></tr><tr><td>Mean</td><td>29</td><td>36</td><td>14</td><td>17</td><td>4</td></tr></table> Table 1.1	Facilities	Level of Satisfaction					Very satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied	Somewhat dissatisfied	Very dissatisfied	Waterfront recreational spaces	40	35	14	11	0	Hawker centres	28	39	2	29	2	Transport	15	22	33	20	10	Sustainable Features	37	40	15	7	1	Retail Shops	25	42	6	18	9	Mean	29	36	14	17	4
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		The students accepted the hypothesis that “Punggol residents are satisfied with the amenities in Punggol”. Evaluate the validity of their conclusion. [6] - Based on Table 1.3, it is correct to accept the hypothesis as most of the residents chose ‘somewhat satisfied’ and ‘very satisfied’ options as shown by the mean calculations which is 36 and 29 accordingly. - Moreover, the survey question asked are aligned to the purpose of the investigation - It might be valid as 100 people were interviewed which might be representative of the large population of residents in Punggol. - However, the students collected data at only 1 location which is the entrance of Punggol Waterway Park. As most respondents could have been there to use the recreational space, their answers might be biased in saying they are very satisfied with the recreational spaces. - Interviewees may not have a clear understanding of the facilities such as “sustainable features’ which may result in inaccurate responses. - It might not be valid if the students asked non-Punggol residents as there might be visiting residents from other neighbourhoods.
2		Cluster 2: Tourism
	(a)	Study Fig. 2.1, an extract from an online article about tourism in Barcelona, Spain. Tourism in Barcelona Barcelona, a renowned tourist destination, saw a significant boost in its profile after the 1992 Summer Olympics. Following this, tourist numbers steadily increased, making tourism a major economic driver, and leading to expanded infrastructure with many hotels and attractions. In 2017, The number of tourists has reached 11.3 million in Barcelona and 8.9 million in the city, doubling the local population. Recently, the city faces challenges like overcrowding, rising living costs, and occasional tensions between tourists and locals. Despite this, Barcelona remains popular, drawing millions of visitors annually. Fig 2.1
	(i)	Using Fig 2.1, identify the tourism development stage. [1] Consolidation Stage
	(ii)	With reference to Fig 2.1, explain the negative social and environmental impacts of tourism. [4] - Overtourism in Barcelona <u>can cause cultural clashes when people of different beliefs come together and do not understand each other’s perspectives.</u> This can threaten traditional customs and values, which can affect local communities in tourist destination regions significantly. - With more tourist, <u>crime rates can increase in can decrease the standard of living of locals and give rise to negative sentiments between tourists and locals.</u> - Overtourism <u>can lead to pollution such as improper disposal of litter by tourists at the beach with can affect marine life.</u>

		Overtourism can also <u>lead to depletion of resources</u> as more resources are used to accommodate them which will emit more greenhouse gasses and building of more accommodations for tourists will lead to further encroachment of nature threatening wildlife. <i>Accept other answers. Students must address both social AND environmental impacts and explain the REASONS (in bold)</i>
	(b)	Describe two ways countries can reduce negative social impact of tourism and promote sustainable tourism. [4] - Tourism board of countries can encourage visitors to explore lesser-known neighborhoods and attractions outside the city center. (1) This can help distribute tourist traffic more evenly and reduce overcrowding in popular areas (1) - Invest in sustainable transportation options, such as expanding bike lanes, enhancing public transit, and promoting walking tours. (1) This reduces traffic congestion and environmental impact. (1) - Involve local communities in tourism planning and decision-making processes. (1) This ensures that residents' voices are heard and their needs are considered, fostering a sense of ownership and cooperation. (1) <i>Accept other answers. (e.g green certification of businesses, cap on visitor no, educating tourists)</i>
	(c)	Study Fig. 2.2, which is an abstract of an article on second city travel. Second City Travel What is The Second City Travel Trend? The second city travel trend is all about traveling beyond tourism hot spots. It means factoring in a second, lesser-known destination when traveling a region. By doing so, travelers help to reduce <u>overtourism</u> and spread tourism dollars to communities beyond the popular tourism spots. Second city tourism is a way to help protect the destinations from the structural damages that often come from mass tourism. Fig. 2.2 With reference to Fig. 2.2 and using an example, explain why there is an increasing popularity among tourists for second city travel. [5] to discover unique travel experiences.

		○ Often, these remote destinations and ‘second cities’ were not previously or easily accessible. ● This trend is fuelled by globalisation due to advancements in communications and transportation, hence reducing the barriers previously posed by physical distance: ○ Globalisation has facilitated a greater flow of information on possible travel experiences. ○ It is now easier for travellers to share their experiences through online media platforms such as Instagram. People are hence more enticed by novel travel experiences in remote destinations or ‘second cities’. ○ These experiences can also be more easily planned and booked online. ○ Advancements in transportation, such as new modes of travel and the expansion of transportation infrastructure, have resulted in remote destinations becoming more accessible. ○ Places such as Antarctica have become increasingly popular as people seek to explore one of the world’s last untouched regions. This is facilitated by the rise in cruise ships offering tours, making it convenient for tourists to travel there. ○ With better connectivity in transport such as through domestic flights or rail networks, access to ‘second cities’ is enhanced too. ○ Moreover, the travelling costs are often much lower as compared to tourist hotspots. ● Kep, Cambodia – Instead of Phnom Penh, tourists are increasingly considering the town of Kep to enjoy its scenic beaches and visit its crab market. <i>Award 1 mark for each explanation for the increasing popularity for second city travel, to a maximum of 4 marks.</i> <i>Award a maximum of 1 additional mark for further development of each explanation, where applicable.</i> <i>Reserve 1m for a named example.</i>
	(d)	Study Fig. 2.3 (Insert), which shows the total international tourism receipts and receipts per arrival in 2017 of the respective countries. With reference to Fig. 2.3, compare the international tourism receipts and the receipts per arrival across the different countries. [4] ● The highest international tourism receipts are in Spain at USD 75.3 billion while the highest receipts per arrival is Australia at USD 4730. ● Although New Zealand is seven times lower in international tourism receipts, compared to Spain, at USD 75.3 billion, the receipts per arrival is much higher than Spain, at USD 2980 Australia which has slightly more than half at USD 41.7 billion (international tourism receipts). ● Eastern European countries such as Latvia, Lithuania, Romania and Slovenia generally have a lower international tourism receipts and receipts per arrival as compared to western European countries such as Spain, France and Italy. [Accept other possible answers] OR ● Both Spain and France have high international tourism receipts at 75.3 USD billion and 58.9 USD billion

		• However, both Spain and France have low tourism receipts per arrival at 920USD and 680USD • On the contrary to Spain and France, countries like Iceland and NZ have low international tourism Receipts of 3 and 10.6 USD billion. • However, both Iceland and NZ have receipts per arrival, higher than that of Spain & France, at 1350USD and 2980USD [Accept other possible answers]
4		Cluster 4: Tectonics
	(a)	Study Fig. 4.1 (Insert), a satellite image of the San Andreas Fault. Describe the plate movement at San Andreas Fault in Fig.4.1. [2]
		• Transform plate boundary [1 mark]. • The plates are moving in opposing directions [1mark]. • The North American plate slides past the Pacific Plate, resulting the San Andreas Fault. [1 mark]
	(b)	Suggest how monitoring and warning systems can reduce vulnerability to earthquake hazards. [3]
		• Monitoring and warning systems are a set of devices used to detect seismic waves and ground deformation. [1] • That will help to make predictions and send warnings about potential hazards. [1] • The warnings will enable people to evacuate to a safer place, reducing their susceptibility to earthquakes. [1]
	(c)	Outline two reasons why the number of deaths for earthquakes with similar magnitudes could vary. [4]
		• The population densities of affected areas could differ significantly, the number of people affected by earthquakes with similar magnitudes at different locations could differ [1 mark]. Generally, a higher number of deaths can be expected at densely populated urban areas as compared to less populated rural areas [1 additional mark]. • Different locations could have different soil and rock properties, resulting in differing effects of ground shaking at two locations experience earthquakes of similar magnitudes [1 mark]. Locations with saturated soils and rocks could experience soil liquefaction, which causes buildings to collapse easily [1 additional mark]. • The different times of occurrence of an earthquake would influence

		people's readiness to evacuate the disaster [1 mark]. Accept any other plausible reasons.
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(d) 'Some strategies for managing the risk of volcanic eruptions are more effective than others.'

To what extent do you agree with this statement? Explain your answer. [9]

Level	Marks	Generic Level Descriptors for 9-Mark AO3 Questions
3	7 - 9	Develops arguments that supports both sides of the discussion clearly using a range of points with good elaboration. Examples 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.
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

L1: 0-3 mks: Brief Responses

L2: 4-5 mks: Responses with detailed eggs but no comparison
6mks: Some Comparison

L3: 7-9mks: At least 2 to 3 strategies. Comparison shown as to why one strategy is better than the other. Brought in at least ONE geographical concept of SCALE, PLACE or SPACE.

The effectiveness of disaster risk management strategies in response to volcanic eruptions varies significantly, with some approaches proving more effective than others. Certain strategies, such as timely evacuation and the provision of basic social and psychological services, can be more impactful compared to search and rescue efforts. This evaluation is based on their ability to minimize loss of life, ensure safety, and support the well-being of affected populations.

Search and rescue operations are critical in the immediate aftermath of a volcanic eruption. These efforts are aimed at locating and saving individuals who may be trapped or injured. While search and rescue are essential, their effectiveness is often limited to the short-term response phase. After the eruption of Mount Ontake in Japan in 2014, search and rescue teams faced significant challenges due to the harsh conditions, including ash clouds and unstable terrain, which hampered their efforts. Thus, the chaotic environment following an eruption can hinder rescue operations, and the chances of survival for those trapped diminish over time. Additionally, search and rescue efforts typically occur after the initial impact, meaning they do not prevent casualties but rather respond to them.

Timely evacuation is one of the most effective strategies for minimizing the impact of a volcanic eruption. By removing people from high-risk areas before an eruption occurs, the potential for loss of life is significantly reduced. Effective evacuation plans require accurate monitoring and early

warning systems, clear communication channels, and well-organized logistics. For instance, the successful evacuation of residents around Mount Pinatubo in the Philippines in 1991 saved thousands of lives. The proactive approach of evacuation contrasts with the reactive nature of search and rescue, demonstrating its superior effectiveness in protecting human lives.

The provision of basic social and psychological services is crucial for the long-term recovery and well-being of affected communities. After the immediate danger has passed, survivors often face challenges such as loss of homes, livelihoods, and loved ones. Providing access to food, clean water, shelter, and medical care helps meet their basic needs and stabilize the situation. Following the eruption of Mount Merapi in Indonesia in 2010, the government and various NGOs provided extensive support to the affected communities. This included temporary shelters, food supplies, clean water, and medical care. Additionally, psychological services are essential to address trauma and mental health issues that arise from such catastrophic events. Long-term support aids in the overall recovery process, helping individuals rebuild their lives and communities.

In conclusion, while all three strategies—search and rescue, timely evacuation, and the provision of basic social and psychological services—are important components of disaster management, timely evacuation and the provision of basic services tend to be more effective in the context of volcanic eruptions. Evacuation helps prevent casualties by removing people from danger zones, and comprehensive social and psychological support fosters long-term recovery and resilience in managing the risk of volcanic eruptions.

L1: 0-3 mks: Brief Responses

L2: 4-5 mks: Responses with detailed eggs but no comparison
6mks: Some Comparison

L3: 7-9mks: At least 2 to 3 strategies. Comparison shown as to why one strategy is better than the other. Brought in at least ONE geographical concept of SCALE, PLACE or SPACE.

	AO1	A02	A03
Question 1			
(a)		4	
(b)	4		
(c)			6
Question 2			
(a) (i)		1	
(a) (ii)		4	
(b)	4		
(c)		5	
(d)		4	
Question 4			
(a)		2	
(b)	3		
(c)	4		
(d)			9
Total	15	20	15
Recommended	15	20	15