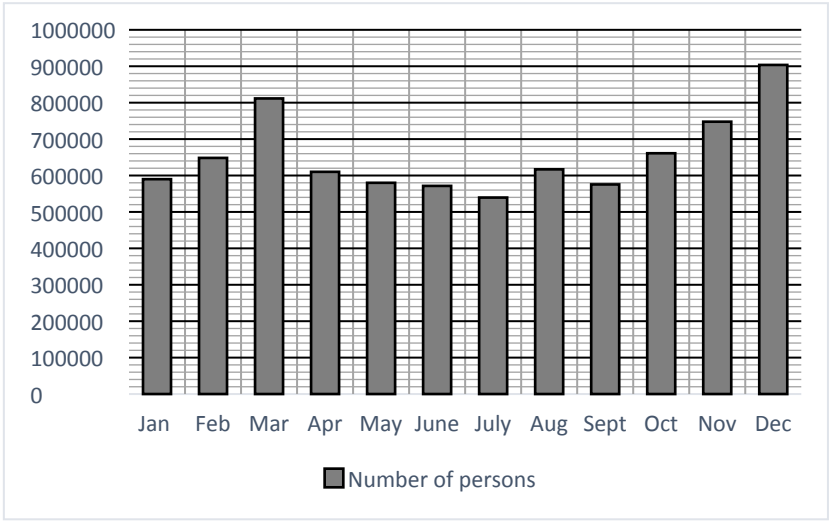


Question	2025 4E5NA Prelim Mark Scheme	Marks
1(a)	With reference to Fig. 1.1, explain how people acquire a sense of place in their neighbourhoods.	[4]
	Award 1 mark for each explanation of how people can acquire a sense of place in their neighbourhood to a max of 4 marks. Award a max of 1 additional mark for development of each explanation, where applicable Possible responses include: • A sense of place is developed when there are opportunities for people to interact with one another [1m] Community events such as the one shown in Fig. 1, allows children get to play together on the bouncy castle/adults in the neighbourhood get to have conversations while the children play [1 additional mark] • These experiences will help people to create positive memories/meanings for the place/location.[1m] • It helps to build people's identity as individuals living in their neighbourhood. [1m] • Thus, eventually developing a sense of attachment to these places, enabling them to feel a sense of belonging/ a sense of place.[1m] • People can also acquire a sense of place when there is repeated encounter with people/object, creating meaning and object for them [1m] AO1	
1(b)	Study Fig. 1.2 (Insert), which shows the location of Tampines Mass Rapid Transit (MRT) station and its surrounding amenities. Using Fig. 1.2, explain the spatial association between Tampines MRT station and its surrounding amenities.	[3]
	Award 1 mark for each explanation of relationship between location of Tampines MRT to its surrounding amenities. Award a max of 1 additional mark for development of each suggestion, where applicable Possible responses include: • The MRT station is located near the retail malls/integrated community hub [1m] as seen in the figure, Tampines mall/Eastlink mall/Tampines community plaza is just next to it. [1 additional mark] • Such close proximity provide convenience for people to get access to shopping malls to buy daily groceries/access to community services such as the library easily [1m] • The MRT station is also located near to the bus interchanged to increase the convenience for people to switch from one mode of transport to the other [1m] AO2	
1(c)	With reference to Fig. 1.3, suggest a risk that the students may encounter during the fieldwork.	[1]
	Possible responses include: • Collision with other pedestrian / cyclist	

	Cars ramming beyond the railing	
	AO2	
1(cii)	Using Table 1.1 and Fig. 1.4, evaluate the effectiveness of Silver Zones in increasing pedestrian safety for the elderly.	[3]
	Award 1 mark for each evaluation on the effectiveness of Silver Zone increasing pedestrian safety for the elderly Award a maximum of 1 additional mark for further development of each evaluation, where applicable. Possible responses include: Successful: - Majority of the vehicles were recorded to have reduced their speed to keep within 30 – 40km/h [1m] across the 3 timings, 73% to 83% of the vehicles were driving within 30 – 40km/h[1 additional mark] - The elderly also felt that the streets are safer with the implementation of silver zone [1] 80% of the elderly felt that the street are now safe to very safe Not successful - There were still a number of cars that drive beyond 40km/h and up to 60km/h [1] a total of 5 vehicles were recorded to drive at 51 to 60km/h [1 additional mark] AO3	
1(ciii)	Evaluate the validity of the students' findings.	[3]
	Award 1 mark for each evaluation of the validity of the students' findings. Award a maximum of 1 additional mark for further development of each evaluation, where applicable. Possible responses include: Valid: - Recording the speed of the oncoming vehicles provide information if drivers slow down to the speed limit thus enhancing pedestrian safety [1] - use of handheld speed camera ensure data collected is objective [1] - Survey targets elderly which capture their perspective on how the implementation of Silver Zone could have impacted them [1m] Not valid: - Drivers might slow down when they see the handheld speed camera [1] this can skew the results to make the Silver Zone appear more effective than it appears to be. - Data is only collected on a Monday and does not take into traffic patterns, driver behavior on other days of the week. [1] on a weekend, drivers may actually speed up due to the lack of pedestrian/number of vehicles on the road [1 additional mark] AO3	

2(ai)	Using the data in Table 2.1, complete the bar graph in Fig. 2.1 to show the number of tourist arrivals for the month of May.	[1]
	 May data: 580000 AO1	
2(aii)	Using Fig. 2.1 and Table 2.1, account for the change in tourist arrivals to Taiwan from April to July.	[3]
	Award 1 mark for each explanation for the drop in tourist arrivals to Taiwan from April to July Award a max of 1 additional mark for development of each explanation, where applicable Possible responses include: - Drop in tourist arrivals from the month of April to July due to earthquake/natural disaster [1] from 610146 to 539454 [1 additional mark] - Many tourists cancelled/postpone their trip due to fear of safety/that the earthquake will happen again [1] - Destruction to tourism infrastructure and attractions due to earthquake would have also led to a reduction in tourist arrivals. AO2	
2(b)	Describe <u>two</u> characteristics of tourist destination regions in the consolidation stage of the tourism development cycle.	[2]
	Award 1 mark for each description of characteristics of tourist destination region at the consolidation stage Possible responses include: - Growth of tourists arrivals start to slow - Total annual tourists arrivals at the destination outnumber the total local population - Tourism industry dominates the local economy [1] employing a significant number of workers and contributes significantly to the local economy - The building of attractions and facilities starts to slow down - Majority of the tourists facilities and hotels are often owned by large multinational companies, supporting large number of tourists.	

	AO1							
2(c)	Using Fig. 2.2, explain how the tourist guide can help achieve social sustainability through tourism development in Kyoto. Award 1 mark for each explanation to show how the guide can help to achieve social sustainability Award a max of 1 additional mark for development of each suggestion, where applicable Possible responses include: • The guide helps to promote intercultural understanding as it informs the tourists clearly what are the dos and don't's in Kyoto [1] e.g to be considerate when moving quietly when they are exploring residential areas or religious sites [1 additional mark] • Tourists are also encouraged to interact respectfully when interacting with locals and learning about their local culture [1] e.g. they should not stop geishas on the street and take photos without their permission [1 additional mark] • This will thus enable local culture to be meaningful for both locals and tourists thus leading to continued practice and preservation of culture by locals (ensuring social sustainability)	[3]						
	AO2							
2(d)	'Government plays the most important role in influencing sustainable tourism development.' How far do you agree with this statement? Explain your answer.	[9]						
	Relevant content includes: Stakeholders who can play a role in influencing sustainable tourism development: • Government • International organisations • Businesses • Locals • Tourists The answer could explain the effectiveness (both advantages and limitations) of the relevant stakeholders in influencing sustainable tourism development with reference to examples. The evaluation could acknowledge the various stakeholders play an important role in influencing sustainable tourism development, government has the greatest degree of influence as they have the power to draw up and implement plans to achieve sustainable tourism development, and also to override decisions/perspective made by the stakeholders which can hinder/promote sustainable tourism development. <table> <tr> <th>Level</th><th>Marks</th><th>Descriptors</th></tr> <tr> <td>3</td><td>7–9</td><td>Develops arguments that supports <u>both sides of discussion</u> clearly, using a range of points with <u>good elaboration</u>. <u>Examples used</u> demonstrate a comprehensive understanding of the issue or phenomenon. <u>Evaluation</u> is derived from a <u>well-reasoned consideration of the arguments</u>.</td></tr> </table>	Level	Marks	Descriptors	3	7–9	Develops arguments that supports <u>both sides of discussion</u> clearly, using a range of points with <u>good elaboration</u> . <u>Examples used</u> demonstrate a comprehensive understanding of the issue or phenomenon. <u>Evaluation</u> is derived from a <u>well-reasoned consideration of the arguments</u> .	
Level	Marks	Descriptors						
3	7–9	Develops arguments that supports <u>both sides of discussion</u> clearly, using a range of points with <u>good elaboration</u> . <u>Examples used</u> demonstrate a comprehensive understanding of the issue or phenomenon. <u>Evaluation</u> is derived from a <u>well-reasoned consideration of the arguments</u> .						

	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. <u>No examples provided or examples are generic</u>, demonstrating a basic understanding of the issue or phenomenon. Evaluation is simple, missing or unclear. 0 0 No creditworthy response. AO3	
3(ai)	Using Fig. 3.1, state the pressure zone experienced in Central Asia and Australia.	[1]
	- Central Asia: Low pressure - Australia: High pressure AO2	
3(aii)	With reference to Fig. 3.1, explain the importance of Southwest monsoon to farmers in Indian sub-continent.	[2]
	Award 1 mark for each explanation why Indian sub-continent experiences high rainfall Possible response include: - Southwest monsoon picks up moisture as it moves over Indian ocean, thus bringing heavy rain to Indian sub-continent. [1] - This thus provides water for their crops/agricultural fields [1] AO1	
3(b)	Using Fig. 3.2, describe the global distribution of areas experiencing an annual net loss in forest cover in 2020.	[3]
	Award 1 mark for each description of areas experiencing a net loss in forest cover Award a maximum of 1 additional mark for further development of each description where applicable. Possible responses include: - Annual net loss in forest cover in 2020 is unevenly distributed across the world [1] eg occurring mainly in South America, Africa and Southeast Asia. [1 additional mark] - Africa experienced the highest annual net loss in forest cover [1] with 9 countries experiencing an annual net loss of 2 to 3% of forest cover [1 additional mark] AO2	

3(c)	Explain how deforestation use contributes to enhanced greenhouse effect.	[4]
	Award 1 mark for each explanation why changing land use contributes to enhanced greenhouse effect Award a max of 1 additional mark for development of each explanation, where applicable Possible response includes: • To carry out agricultural, industrial activities and urban development, it requires the removal of large areas of forest [1] The need for resources such as timber to support industrial activities also had led to deforestation. [1 additional mark] • Deforestation reduces the number of trees to absorb carbon dioxide through photosynthesis [1] it will also result in the soil beneath to be exposed to sunlight which increases soil temperature and rate of carbon oxidation. [1 additional mark] • Hence results in an increase in concentration of carbon dioxide in the atmosphere thus leading to enhance greenhouse effect [1] AO1	
3(di)	Using Fig. 3.3, describe the difference in global crop yield for maize in a world with and without climate change for 2010.	[2]
	• Lower crop yield for maize in a world with climate change when compared to without climate change [1] • 0.2 t/ha lesser in crop yield for maize when there is climate change. AO2	
3(dii)	Suggest two factors that influenced the change in crop yield for maize between 1981 and 2010.	[2]
	• Use of technology had led to an increase in crop yield in 2010 • Climate change reduces the max possible increase AO2	
3(e)	Explain why climate change affects disadvantaged communities and developing countries to a larger extent.	[3]
	Award 1 mark for each explanation why climate change affects disadvantaged communities and developing countries to a larger extent Award a max of 1 additional mark for development of each explanation, where applicable Possible responses include: Disadvantaged communities: • Do not have proper housing, often living in open areas thus directly exposed to weather elements which would mean an increased risks from extreme weather events [1] such as heatwaves/floods/tropical storms [1 additional mark] • Climate change reduce crop yields, which can lead to an increase in food prices, disadvantaged community may not be able to afford to buy food. [1] For developing countries • Lack financial resources to put in place measures to reduce the impact of	

	climate change [1m] e.g. they do not have ability to afford the construction of sea walls along coast to manage sea level rise and coastal flooding [1 additional mark] Developing countries often have to channel money to rebuilding the country after an climate related event, thus slowing down development/allow developing countries to attain sustainable development [1m] this is because there is less money for development of infrastructure, education and healthcare. [1additional mark] AO1	
4(ai)	Identify the landform Y shown in Fig. 4.1 Award 1m for each landform identified - X: Fold mountain - Y: Volcano AO2	[2]
4(aii)	Using Fig. 4.1, explain how landform Y is formed. Award 1 mark for each full comparison. Award up to a max of 1m for similarity / difference in process Possible responses include: - Two continental plates collide /push towards each other - Enormous pressure causes the rocks to be uplifted and buckle forming fold mountains. AO1	[2]
4(b)	Using Fig. 4.2, describe the global distribution of major active volcanoes. Award 1 mark for each description global distribution of major active volcanoes Award a maximum of 1 additional mark for further development of each description where applicable. Possible responses include: - Generally, along converging plate boundaries [1m] e.g. when North American plate collides with the pacific plate [1 additional mark] a belt of major active volcanoes can be observed along the Pacific Ring of Fire [1 additional mark] - Exception with some volcanoes found away from plate boundaries [1m] e.g. Kilauea, a major active volcano is located within the Pacific Plate [1 additional mark] AO2	[3]
4(c)	Explain why stratovolcanoes tend to have more explosive eruptions. Award 1 mark for each explanation why stratovolcanoes tend to be more explosive Possible responses include: - Stratovolcanoes have magma that is more viscous / the lava is thicker in consistency - As magma rises to the surface, the dissolved gases cannot escape easily [1m] - More pressure builds up until gases escape explosively [1m]	[3]

	AO1	
4(d)	Explain how vulnerable conditions can affect the extent of disaster risk during an earthquake.	[4]
	Award 1 mark for each explanation how vulnerable conditions can affect the extent of disaster risk Award a max of 1 additional mark for development of each explanation, where applicable Possible responses include: Quality of building design and construction: - Buildings that are of poorer quality design and constructions are less likely to be able to withstand shaking of the ground and thus more prone to collapsing [1] this buildings are likely to be built with low quality materials such as zinc [1 additional mark] does not have earthquake resistant features such as reinforced steel walls [1 additional mark] do not follow building code set by authorities [1 additional mark] Soil and rock properties - Soil that is saturated and loose may result in liquefaction when an earthquake occurs resulting in buildings sinking into the liquified soil and tip over. [1m] - As seismic waves travel from hard rock to soft rocks, seismic wave gets amplified which results in more intense shaking of the ground thus increasing likelihood of buildings collapsing. [1m] - Above vulnerable conditions can result in more people being trapped due to the collapse of buildings/infrastructure thus leading to more deaths and injuries [1m] AO1	
4(e)	Using Fig. 4.3, explain how tectonic hazards can affect the natural and human systems.	[4]
	Award 1 mark for each explanation how tectonic hazards can affect natural and human systems Award up to a max of 2m for explanation how tectonic hazards can affect human systems Award a max of 1 additional mark for development of each explanation, where applicable Possible responses include: - From fig. it shows an earthquake occurring on the seabed, which results in the formation of tsunami [1] as the waves approaches the coast, it increased in height and devastate shorelines the waves hit [1 additional mark] Impact on natural system - Large amount of seawater can flood coastal wetlands and habitats, hence destroying habitats. [1] Impact on human system - Fast moving waters from tsunami can carry large amount of debris, sweeping away buildings and infrastructure and destroying them.[1] - The debris can also snap electricity and communication cables, which disrupts the supply of these services. [1]	

	• The fast sweeping waves result in people drowning [1] • The debris carried by the sweeping waves can hit and kill people [1]	
	AO2	

Assessment Specification Grid

Qn	Max	Question part	AO1	AO2	AO3
1	14	(a)	4		
		(b)		3	
		(ci)		1	
		(cii)			3
		(ciii)			3
		Total	4	4	6
2	18	(ai)		1	
		(aii)		3	
		(b)	2		
		(c)		3	
		(d)			9
		Total	2	7	9
3	18	(ai)		2	
		(aii)	2		
		(b)		3	
		(c)	4		
		(di)		2	
		(dii)		2	
		(e)	3		
		Total	9	9	0
4	18	(ai)		2	
		(aii)	3		
		(b)		3	
		(c)	3		
		(d)	4		
		(e)		4	
		Total	9	9	0

AO1: 15

AO2: 20

AO3: 15