

Answer **all** questions.

1 Cluster 1: Geography in Everyday Life

- (a) Explain how environmental stewardship can be fostered to build sustainable urban neighborhoods.

.....

.....

.....

.....

.....

.....[2]

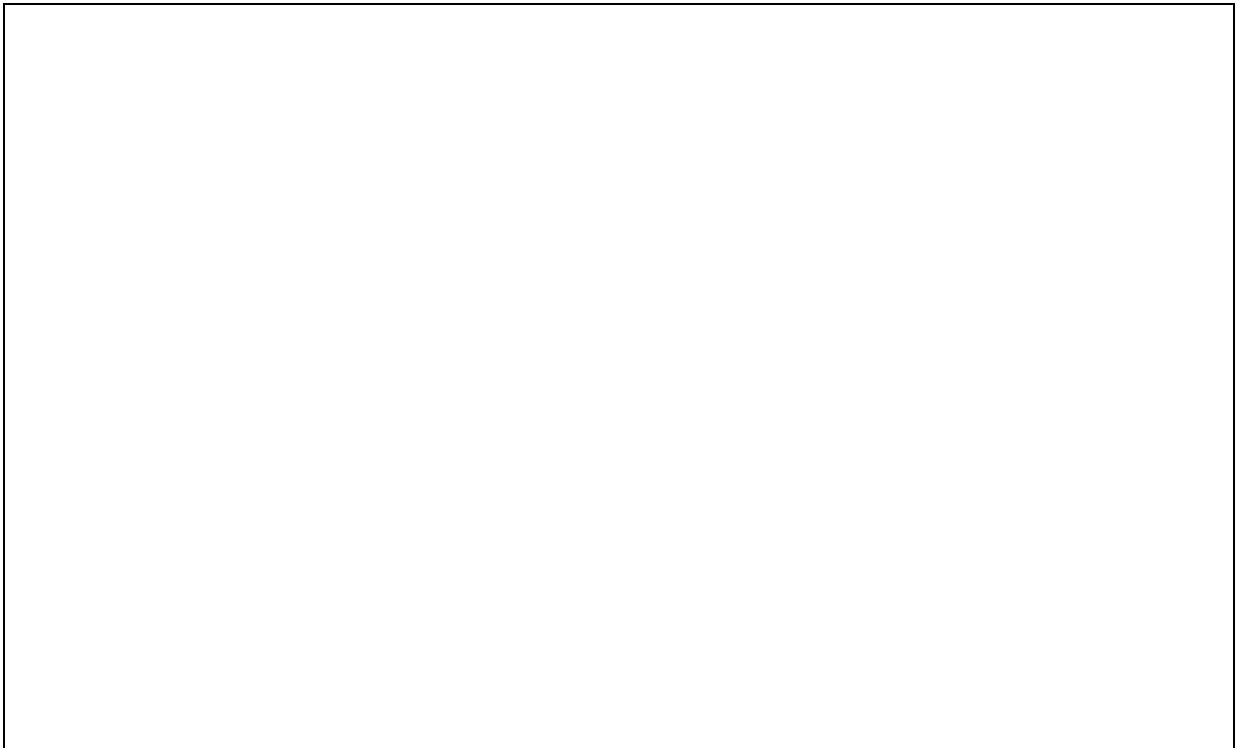
(b) Fig 1.1 is an exemplary residential estate in the HDB's Green Towns Programme.

Model Estate of HDB Green Towns Programme



Fig 1.1

Sketch the residential estate as shown in Fig 1.1. Annotate the sketch to show two features that promote environmental sustainability.



[3]

(c) Explain how media representations of place may affect an individual's sense of place.

.....

.....

.....

.....

.....

.....

.....

.....[3]

- (d) Fig 1.2 (Insert) shows the distribution of industrial estates, business nodes, institutes of higher learning, airports and ports in Singapore.

With reference to Fig 1.2, describe the spatial pattern that is shown on the industrial estates of Singapore.

.....

.....

.....

.....

.....

.....[2]

- (e) Describe the negative impacts of fire hazards on the community.

.....

.....

.....

.....

.....

.....

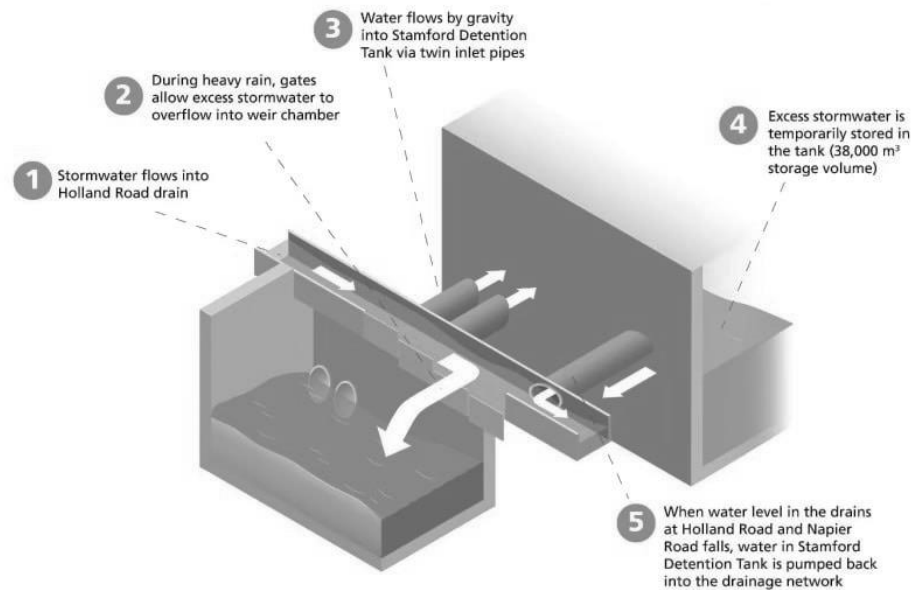
.....

.....[3]

- (f) Fig. 1.3 shows flooding along Holland Road and one of the disaster risk management strategies employed in Singapore.



HOW EXCESS STORMWATER ENTERS AND EXITS THE SDT



*SDT stands for Stamford Detention Tank

Fig 1.3

Using Fig 1.3, explain how this disaster risk management strategy enhances the sustainability of the neighborhood.

.....

.....

.....

.....

.....

.....[2]

2 Cluster 4: Tectonics

(a) Explain how slab-pull force causes the movement of tectonic plates.

.....

.....

.....

.....

.....

.....[2]

- (b) Study Fig 2.1, which shows information about the different plate margins in the world.

Map of Plate Boundaries on Earth

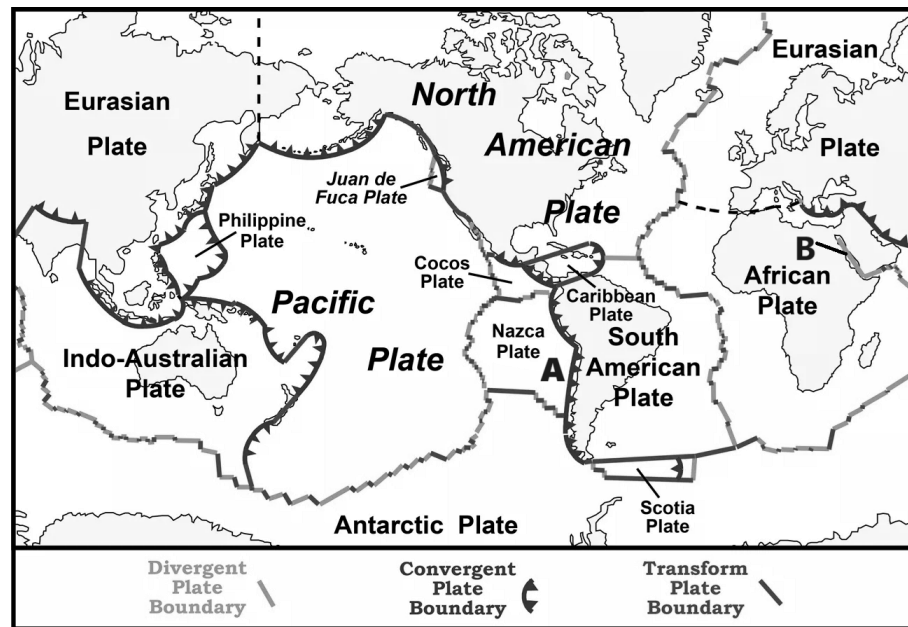


Fig 2.1

With reference to Fig 2.1, compare the processes and tectonic features formed at the plate boundaries **A** and **B** respectively.

.....

.....

.....

.....

.....

.....

.....

.....

.....[4]

Number of Tsunamis and Deaths in Japan (1923-1993)

Year	Number of Tsunamis	Number of Deaths	Location(s)
1923	3	2310	Sagami Bay
1933	2	3022	Sanriku
1944	1	3358	Off Southeast Coast Kii Peninsula
1946	1	1362	South Coast of Honshu
1964	3	476	Honshu
1983	3	424	Noshiro
1993	3	441	Hokkaido

Using Fig 2.2, comment on any relationship between the number of tsunamis in Japan and the number of deaths from the Tsunamis from 1923 to 1993.

[illegible]

- (d)** Discuss how effective is increasing residents' preparedness for response and recovery in building community resilience to earthquakes.

[6]

3 Cluster 5: Singapore

(a) Explain why Singapore is vulnerable to energy insecurity.

.....

.....

.....

.....

.....

.....[2]

(b) Describe how climate change could impact Singapore.

.....

.....

.....

.....

.....

.....

.....

.....[3]

- (c) (i) Fig 3.1 (Insert) shows a map that indicates the intensity of shaking at each area of Singapore in the event of an earthquake from neighboring countries.

Using Fig 3.1, describe the distribution of building shaking intensity in Singapore due to earthquakes in neighboring countries.

.....

.....

.....

.....

.....

.....

.....

.....[3]

- (ii) With reference to Fig 3.1 and what you have learnt from Fig 1.2 (Insert) in question 1, explain how earthquakes in another country can pose a risk on the economy of Singapore.

.....

.....

.....

.....

.....

.....

.....

.....[3]

- (d) Figs. 3.2 and 3.3 shows some of the considerations Singapore took in building social resilience in its citizens.

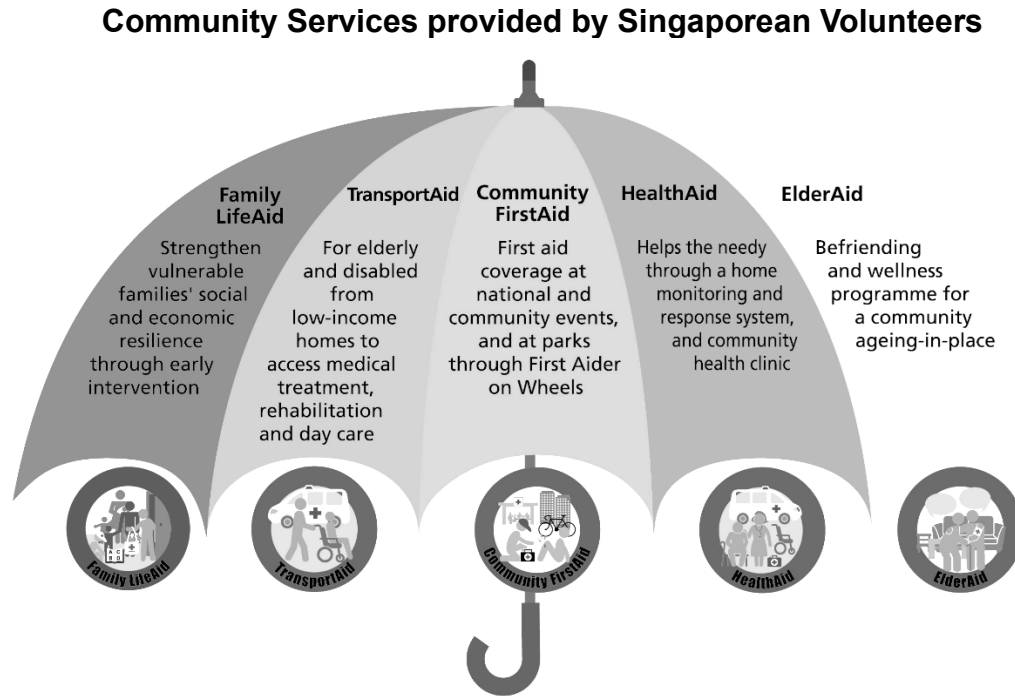


Fig 3.2

Vulnerable Groups in each Domain of Resilience

Vulnerable groups within each domain of resilience			
Mental Resilience	Social Resilience	Physical Resilience	Financial Resilience
<ul style="list-style-type: none"> • Unemployed • Females • Lower education levels 	<ul style="list-style-type: none"> • Unemployed • Lower education • Older adults • Single • Smaller housing types • Lower education levels 	<ul style="list-style-type: none"> • Unemployed • Older adults • Smaller housing types • Lower education levels 	<ul style="list-style-type: none"> • Unemployed • Single • Smaller housing types • Lower education levels

Fig 3.3

With reference to Fig. 3.2 & 3.3, evaluate Singapore's social resilience efforts.

[9]

Additional Page

If you use the following page to complete the answer(s) to any question(s), the question number(s) must be clearly shown.

This image shows a full page of white paper with horizontal dashed lines, typical of primary-ruled notebook paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Additional Page

If you use the following page to complete the answer(s) to any question(s), the question number(s) must be clearly shown.

[illegible]

Copyright acknowledgements

- Fig 1.1 <https://www.propertyguru.com.sg/property-management-news/2019/12/185330/hdb-raises-solar-target-for-2030-to-540mwp>
- Fig 1.2 https://lkyspp.nus.edu.sg/docs/default-source/ips/forum-2_lim-eng-hwee.pdf
- Fig 1.3 <https://www.todayonline.com/singapore/improved-flood-prevention-measures-around-orchard-road-month>;
<https://www.theonlinecitizen.com/2021/08/30/over-s2-billion-already-spent-has-it-paid-off/>
- Fig 2.1 <https://www.nps.gov/subjects/geology/plate-tectonics-evidence-of-plate-motions.htm>
- Fig 2.2 https://www.researchgate.net/figure/Tsunamis-that-caused-more-than-100-deaths-by-year-in-Japan_fig6_259172075
- Fig 3.1 https://www.researchgate.net/figure/The-ARSI-map-of-Singapore-for-the-March-28-2005-earthquake-event-N-S-direction-based_fig3_311394397
- Fig 3.2 <https://redcross.sg/component/content/article/166-clare.html?catid=34:local-services&Itemid=207>
- Fig 3.3 <https://rosa.smu.edu.sg/sites/rosa.smu.edu.sg/files/Briefs/Singapore%20Resilience%20Study.pdf>