

2019 VCE Geography examination report

General comments

Areas of strength

Knowledge of content and context to apply knowledge:

- Every question required content and it was evident that students were able to use a large range of learnt materials in their responses.
- Students were often able to use appropriate evidence and elaborations to support their statements, especially in higher-order questioning

Geographical skills:

- Data was presented using a number of maps and students were able to interpret these very well.
- The use of geographic language and literacy was strong, with students able to respond to questions using appropriate terminology.

Areas for improvement

Responding directly to the question:

- All questions require understanding of content, application of appropriate context and conceptual understanding of the question. There was a tendency for responses to list, either in paragraph or list form, a random assortment of content from both Units 3 and 4 that did not have direct relevance to the question. For example, students were able to describe the Paris Climate Agreement in great detail but many did not address key aspects of the question, such as the impacts of melting glaciers and ice-sheets.
- It is important that students choose their content in the appropriate context. This will help support responses in showing a higher-order conceptual understanding of the question.
- Students should note and annotate key components of the question and respond accordingly.

Specific information

Note: Student responses reproduced in this report have not been corrected for grammar, spelling or factual information.

This report provides sample answers or an indication of what answers may have included. Unless otherwise stated, these are not intended to be exemplary or complete responses.

The statistics in this report may be subject to rounding resulting in a total more or less than 100 per cent.

Question 1a.

Marks	0	1	2	Average
%	14	37	49	1.4

The question required students to clearly identify **two** geographical characteristics of the site.

Examples included but were not limited to:

- faces two streets
- a semi-triangular block
- the site is cleared from being a car park
- any other geographic examples/evidence from the site.

The answer must refer specifically to the **site** in Figure 1. The response may have been quantified with evidence from Figure 1.

Most students responded with very clear statements of geographical characteristics of the site. Where errors were made, students tended to refer to the region and repeat their responses in Question 1b.

Question 1b.

Marks	0	1	2	Average
%	4	13	82	1.8

The question required identification of **two** geographical surrounding region characteristics. The response required an understanding of the concept of region and did not have to be quantified with evidence from the figure.

Examples included but were not limited to:

- opposite the library
- Metro/rail stops
- high land value
- south of the river
- inner location in Paris.

Most students responded well with a very clear statement of the geographical characteristics of the region, often using evidence from Figure 1 very well.

Question 1c.

Marks	0	1	2	3	Average
%	3	11	40	46	2.3

The response required a clear statement of **one** way the changed land use shown in Figure 1d is likely to be more suited to the surrounding region than the previous land use. Responses then needed to link the changed land use to the surrounding region and provide an outline of how this change in land use is more suited to the surrounding region than the previous land use. Most students were able to clearly state why the change in land use was more suited, with interconnection to the surrounding region, such as Paris' being an urban area. While many were then able to state how this new land use is better suited others did not clearly outline this aspect.

The following is an example of a high-scoring response.

The land use change from a car part to an apartment block with way more houses of 135 is more suited due to the surrounding Sorbonne University. The apartment block could now allow

over 135 students to seek residence/live across the street from the university, providing easy access and being extremely suited to the location. This is more suited than a carpark as a carpark was taking up an area of land in a densely housed area being an impracticable use of land, when it could be apartments to house more people.

Question 1d.

Marks	0	1	2	Average
%	1	16	83	1.8

The response required a statement of location and then the land use change, for example a 'from and to' statement. Most students were able to clearly identify both the location and the land use change occurring at the location. Many students also provided far greater detail than the question required, for example a description of land use change over human settlement at the location. Students are encouraged to identify the key components of the question, check the mark allocation and respond directly to the question.

Some students chose to focus on a land use classification as distinct from land use change in more general terms. This created confusion for some students when elaborating on state or federal government indices of land use classes as students were not clear on the land use change (as outlined in the study design) that they were investigating. While land use classification indices may be helpful when investigating land use changes, it is advised, as per Unit 3 Area of Study 1, that the location for the fieldwork shows evidence of clear land use change. Some students experienced difficulty in responding to this component of the question. For example, the shift in classification from state to national park tended to be written as a change in land use of forest to forest with no elaborating discussion of the change in land use classification evident.

Question 1e.

Marks	0	1	2	3	4	5	6	7	Average
%	3	4	9	12	19	20	17	17	4.5

The response required a focus on the impacts or likely impacts of the land use change in the surrounding region and not on the land use change site itself. Responses required students to identify at least two impacts of the land use change on the surrounding region and then assess these impacts upon the surrounding region. A framework for the discussion was used by some students, such as positive impacts and negative impacts or social, environmental and economic impacts, all of which were appropriate. At times, students responded with impacts on the land use change location rather than the impacts on the surrounding region. A clear understanding of the surrounding region is required in order to respond to the question at a higher level. Students' use of geographic language supported higher-scoring responses that had clear elaborations often based upon primary sources such as surveys, photographic observations and interviews with key stakeholders at the fieldwork location and within the surrounding region.

There were many responses with very generalised impacts on the surrounding region that could apply to many different fieldwork locations. While changing traffic conditions and traffic congestion are an appropriate area for discussion, higher-order responses provided clear elaboration on the impact of this to the surrounding region that went beyond a generalised statement of traffic increasing. Care needs to be taken when describing environmental impacts. Many developments from industrial or rural agriculture land uses to residential developments are unlikely to have significant environmental impacts on wildlife and soil quality for example, as the previous use as an industrial or agricultural site has already severely altered the natural environment.

Some responses attempted to highlight the impact of emissions and greenhouse gases on the surrounding region. These responses were not as clearly linked to the land use change and its impacts on the surrounding region.

Poor fieldwork choices make it difficult for some students to clearly identify and describe the impacts on the surrounding region, again highlighting the importance of clearly outlining the specific land use **change**.

Question 2

Marks	0	1	2	3	4	5	6	7	8	Average
%	2	2	6	11	19	18	18	14	9	5.0

The response required students to describe the distribution including:

- naming at least **two** major areas of ice cover
- indicating the size and spread of the two named areas
- elaborations including sophistication of geographic literacy, geography concepts and interpretation of the map (e.g. outliers, distinguishing land and sea areas covered by ice).

Many students were able to respond well to the question with an excellent description of the distribution of ice cover as per the figure. Time could have been spent thinking through the distribution as many responses were not well structured and did not use geographic language (such as north, south, latitude) to provide precision on size and spread of named areas.

Students were not required to provide an explanation of the distribution; however, a number of responses were distracted with reasons for the distribution or a comparative to ice cover today. As this was not required in the question, no marks could be awarded for this component of the response.

The following is an example of a high-scoring response.

Around 20, 000 years ago, ice covered approxiametley 5% of the Earths surface, and 30% of its land cover. 95% of this ice cover was concentrated around the two poles, with a ice cap approxiametly 6000km wide on the north pole, and a cap approxiametly 5000km wide surrounding the south pole. This distribution of ice completely covered many areas of todays land, including Antarctica, Greenland, Scandinavia, Canada and Iceland. Areas such as northern Russia and northern USA also were covered by these 2 large ice caps. Spatially, these two large caps are located at opposing poles of the world, with a very high spatial association between ice coverage and distance from the equator (99% of ice is above or below the tropics)

There are some exceptions to this pattern of distribution though, with approxiametly 5% of ice cover not in the 2 large caps. The largest exception is a narrow ice cap in Chile and Argentina (South America). This ice cover makes up about 80% of the ice cover not surrounding the 2 poles. Other exceptions include small areas of ice on what is today known as Central Asia, New Zealand, Switzerland, Eastern Africa and Australia (Tasmania). However, these exceptions are small and sparse, making up only 1 or 2% of global ice cover combined.

Question 3a.

Marks	0	1	2	Average
%	2	9	89	1.9

This question was done very well with clear, succinct responses provided by most students. The question required students to outline either one human activity causing deforestation **or** one natural process causing desertification at a selected location. Most students were able to identify both aspects of the question. Where errors were made, responses mixed key elements of the

question, for example, outlining a natural process causing deforestation. Alternatively, some students neglected to mention a location.

The following is an example of a high-scoring response.

A human activity causing deforestation to occur in Sumatra, Indonesia is the Plantation of Palm oil industry (a major driver of deforestation in Sumatra through deforesting primary and secondary forest to plan palm oil plantation)

Question 3b.

Marks	0	1	2	3	4	5	6	Average
%	3	7	19	25	21	13	12	3.4

The question required students to describe impacts of change in land cover on the environment at the selected location identified in Question 3a. Responses required at least two impacts to be identified and then described and the same location needed to be used. Students could refer to the human or natural environment or a combination of both. The response required a statement of each impact and then further description of the impact(s) at the selected location. A list of impacts is not a description and lower-scoring responses tended to list a range of impacts that could occur at any location rather than providing an in-depth focus on a few impacts at a specific location. Use of evidence, elaborations and data could support the description and higher-scoring responses had clearly described two or more impacts at the location.

The following is an example of a high-scoring response.

As a result of the palm oil plantation in Sumatra, 29 000ha of forest has been deforested since 1990. This has a detrimental effect on wildlife and the environment. A clear example of this that the Sumatra Rhino is being threatened to being extinct as there is only 80 of them remaining in small pockets in the Sumatra forest. In addition to this, there are less than 1000 Sumatran elephants left. The destruction of forest also leave many Sumatran Oranguten and Leopard vulnerable, as they're too are now classified as critically endangered species. Aside from the animals, deforestation also have a very negative impact on the actual Sumatran environment. The 2015 El Nino fire which was started by human activity (clearing of land), was intensified through El Nino (i.e. dryer environment) As a consequence of this, 1750 million metric tonnes of carbon was injected in the atmosphere which greatly impact the environment as it alters and increase the greenhouse gas, resulting the climate to be warmer and less rain in Sumatra forest. In addition to this deforestation in Sumatra has resulted the air quality to decrease, water quality to decrease, as well as a increase in magnitude and quantity of flooding to occur in low lying agricultural area in Sumatra.

Question 4

Marks	0	1	2	3	4	5	6	7	8	Average
%	15	28	15	13	11	7	6	3	2	2.5

This question was challenging for most students, with responses tending to describe a global response and not directly link key components of the question to the response. Students are strongly encouraged to annotate key components of a question and plan a response based upon the question as presented. Higher-order questions such as this require the ability to show conceptual understanding of the question and a checklist-style approach does not work well when there are a number of key elements to a question.

The key elements of Question 4 are evaluating the effectiveness of a global response to the **impacts** of either deforestation or desertification, or melting glaciers and ice-sheets.

Students needed to outline a global response (not national or local). However, there may have been discussion at the local level if appropriate, for example when outlining the impacts of the

selected process. There needed to be a clear outline of the impacts of the selected process and then an evaluation of the effectiveness of the global response in addressing the impacts. Students could use a range of discussion techniques to evaluate the effectiveness of the global response, such as using evidence and/or elaborations and/or criteria. Higher-order responses had an evaluation that was clearly evident and linked to the impacts of the selected process.

While a global response may use spatial technologies, Unit 3 Outcome 2 of the study design requires students to investigate *the use of spatial technologies to assess and manage land cover change at a selected location* and thus this component does not have to be global response to a land cover process.

Overall, students struggled to bring all components together with many focused on a description of a global response. Often students did not describe the impacts of the selected process nor did they highlight how the global response addressed these impacts. A key example was the use of the Paris Climate Agreement, with students writing about the agreement aiming to decrease carbon emissions but not addressing how this would help the impacts of melting glaciers and ice sheets. These responses were far too generalised and tended towards being a repeat of learnt material without addressing key elements of the question.

The following is an example of a high-scoring response.

One response globally to deforestation is the plan from the United Nations Framework for Combatting Climate Change (UNECCC), which is called REDD+ (Reducing Emission from Deforestation and forest Degradation) which began in 2008 and ended around 2014 that involved putting a price on carbon emissions to incentivise companies to reduce logging.

The REDD+ initiative was largely ineffective, as it failed to meet a number of its goals and reduce deforestation. The project was economically unsustainable, as it priced one tonne of carbon at \$24, this mean the project required \$38 billion dollars, and it only received \$3billion in the time of its operation. The lack of sufficient funding meant the project was not able to effectively prevent deforestation.

This project was also socially unsustainable, as natives and local people to areas affected by deforestation were often forcefully removed from their land in order to ensure that it was not at risk of deforestation, as a way of attempting to reduce costs. This resulted in backlash and thus the project was socially ineffective at reducing deforestation.

The project was also environmentally unsustainable, as the global rules of deforestation increased at a rapid rate driving the projects life time, with CO² emissions from deforestation increasing by 13%, and the rate of deforestation globally increasing by 4.19%.

Overall, the project REDD+ was unable to meet any of its goals, and was environmentally, economically and socially unsustainable.

Question 5

Question 5 was answered well by most students. Students could have responded with either a letter or a country name or both, but needed to ensure that their responses were clear.

Question 5a.

Marks	0	1	Average
%	5	95	

D Turkey

Question 5b.

Marks	0	1	Average
%	20	80	0.8

F Canada

Question 5c.

Marks	0	1	Average
%	23	77	0.8

C China

Question 5d.

Marks	0	1	Average
%	14	86	0.9

A Ethiopia

Question 6

Marks	0	1	2	3	4	5	6	7	8	9	10	Average
%	3	3	4	5	8	11	12	12	16	14	12	6.4

The question required students to identify the pattern found on the map of the four most northerly African countries with a statement of whether they agreed with the prompt of the pattern being found in other regions of the world. The question required an understanding of the concept of distribution patterns in order to write a succinct summary of to what extent the pattern is found in other regions of the world. The discussion needed reference to three examples that supported the student's argument. Examples used to elaborate upon the distribution varied and could be regional or country-based and needed to clearly support the assertion made by the student. Geographic literacy was important in this discussion as it helped identify locations and examples on the map.

The concept of total agreement or disagreement with the statement was difficult to support as many exceptions could be found when looking at the map.

Discussion of the causes/causal relationship was not a requirement of the question. The discussion focus is on the distribution pattern and not causal relationships. Some students strayed from this focus and attempted to explain why this pattern occurred and could not be awarded marks for this explanation.

Most students were able to clearly describe the pattern found on the map. Many answers highlighted the greater populations along coastlines compared to inland, while others focused on the greater population densities found in northern parts of the continent of Africa. Comparisons were then made with three other examples and generally students did this well. A focus on examination technique was important as improvements could be made through clearly identifying the three examples and sticking to only three (some students described many more and these could not be awarded marks as they were not required). Students are encouraged to take note of how many and which examples were to be included in order to frame a succinct response to the question.

The following is an example of a high-scoring response.

I agree with this statement to a moderate degree. The pattern of these from Africa countries are linear, coastal for 100 and over people per km², whilst anything inland is extremely low, between

1-10 or less than 1 people per km². The pattern can be replicated to highlight an agreeing view through the central east coast of South America. Here, the linear coastal pattern is evident through 3 regions of 100 and over people/km² all on the coastline, and the rural pattern extends inboard west, where most the inland is less than 1 person/km². To a moderate level of agreeing, the eastern coastline of China is seen to also have the linear coastal pattern of 100 and over people/km², especially China and above, however, inland of this, most of the regions were differ to the African countries, as the population is at mostly 50-100 people per km², not the less than 1 as Africa. To another moderate degree, Australia does not have any 100 and over people/km² on its coastline (linear), rather only 1-10. But it follows the inland pattern of the African countries with less than 1 person per km² for mostly the entire country. Due to these three examples, I agree moderately (to some extent) with the statement about the 4 African countries population distribution patterns.

Question 7

Marks	0	1	2	3	4	5	6	7	8	Average
%	4	4	9	16	18	16	16	10	6	4.4

The question could have been approached in a number of ways and was marked holistically using criteria and descriptors.. The focus was the interconnection between Malthus' theory and population growth and sustainability. While many students could describe and address components of Malthusian theory, there was disconnect between Malthus' thinking and the concept of sustainability. Many responses focused on a justification of Malthus' views rather than an explanation of how these interconnected with population growth and sustainability.

Lower-scoring responses were simplistic, often stating bare details of Malthusian theory in a repetitive manner and focusing on reproduction without mention of sustainability or indeed the impact on population growth. Many responses showed very little understanding of the concept of sustainability beyond an unconnected statement of definition.

A good approach was to break down the question into key elements with annotations and then respond directly to the prompt, which required students to interconnect Malthusian theory, population growth and the concept of sustainability.

The following is an example of a high-scoring response.

In Malthusian theory, the population growth is likely to increase at a rate that is faster than the resource production globally. Once the population exceeds the amount of resource production that the population needs to consume, crisis would occur after this point, resulting in disasters such as wars, diseases and famine. After the disaster, the population is predicted to drop back to a number below the resource production again and exceed the production again after years. In order to prevent from the disasters, the Malthusian theory outlines response with potential, in order to keep the population below the resource production and therefore create better living conditions and sustainability for the future generations. For instance, birth control as a response is suggested by Malthusian theory, which would contribute to a smaller total population, therefore ensures that the total population is maintained below the resource production, while environmental conditions and sustainability can be improved.

Question 8

Students were required to name a country and state whether it is growing or ageing. While no mark is provided the statements here set the examples that are used throughout Question 8.

Unfortunately, a number of responses had examples that conflicted with the country identified or whether it was growing or ageing and thus meant that marks could not be awarded if this was not clear.

When choosing country examples, it is important that a flow is made through the response. Some responses displayed a confusion between timelines, with the introduction of the One Child Policy

(a response that occurred in the 1970s) and the Two Child Policy, with data used to support discussion on the population from 2015 providing conflicting statements. Others used examples that did not affect the population at all as they were far too localised. Using Outcome 2 key knowledge as a way of working through each country studied is essential and this was not always evident in responses.

Question 8a.

Marks	0	1	2	3	4	5	6	Average
%	2	5	13	23	24	16	17	3.8

The question required an identification of one issue and then one associated challenge. For both the issue and associated challenge a description was also required. Issues and associated challenges could vary and needed to follow guidelines from Unit 4 Outcome 2, with issues including meeting healthcare and social service needs. Challenges come out of coping with the issue presented.

Students were, on the whole, able to state and then describe both an issue and a challenge associated with a specific ageing or growing population, using data and elaborations to help them do this. Most responses were not generalised statements about an ageing or a growing population, but were clearly a description of a known population.

A significant proportion of responses confused countries, for example, switching between Japan and China. Alternatively, some students stated China as a growing country with the issue being high fertility rates and the challenge being gender imbalance because of the high fertility rates. The timeline for the China case study was very confused by some students with data spanning over 50 years and gaps within this. China as a case study is a challenging example as it has elements of a growing population (certainly in the One Child Policy period), but also has elements of an ageing population (with the shift to a Two Child Policy as births in 2018 fell to the lowest level in 50 years).

Students are encouraged to differentiate clearly between the issue and challenge. While these can be interrelated a clear differentiation helps support a response.

The following is an example of a high-scoring response.

An issue that Germany is currently facing due to their ageing population is an increased elderly dependency ratio, with 38% approximately of Germany's population being over 65 years old. Due to this high dependency ratio there are a smaller number of people of working age to support the needs of these people, as they require extra services such as geriatric care, and these services come from the government and is sources through taxpayers money. Therefore as there are more non working Germans to working germans there is a heavy tax burden on those who work, for every 1 retiree 3 working germans work to support them.

Question 8b.

Marks	0	1	2	3	4	5	6	Average
%	8	8	16	22	20	14	11	3.3

Identification of only one factor was required, and a statement of how this factor contributes to the population issue and challenge identified in Question 8a. then needed to be made. Responses needed to clearly explain how the factor contributed to the issue and associated challenge using elaboration and appropriate data to support the explanation.

A range of factors were identified with students being specific; for example, using population trends such as high fertility rates, to more generalised factors such as economic, environmental or social factors.

This question showed a wide range in students' abilities to interconnect their factor to the issue and associated challenge. Students were able to describe a factor and then tended to once again describe or elaborate upon the issue and challenge instead of explaining how the factor contributed to the issue and associated challenge.

Question 8c.

Marks	0	1	2	3	4	5	6	Average
%	6	5	10	18	21	20	19	3.8

Students were required to evaluate the success of a response relevant to the issue and associated challenge identified in part a. Most students were able to identify a response and provide some statement of evaluation to the success or otherwise of the response.

Improvement could be made through ensuring that the response directly links to the issue and associated challenge, for example the use of robots in Japan is not a response to the issue of fewer babies being born and the challenge of encouraging women to have more children, instead this is a response to the issue and associated challenge of having a larger aged dependency ratio in Japan. Where responses did not connect back to the issue and associated challenge in part a., students could not be awarded full marks.

Once again China proved to be a very difficult case study with students displaying confusion as to whether it is a growing or ageing population. The One Child Policy was sometimes cited as both an issue and a response and the dates of the changing population being far too wide a range to adequately summarise.

Higher-order answers clearly linked an evaluation of a response to the issue and associated challenge presented in Question 8a. Where students read through the question as a whole they were able to identify the interconnections and respond appropriately. Where students attempted to write learnt material out of context the response was disjointed and not relevant to the question asked.

The following is an example of a high-scoring response.

The Angel Plan was in 1994 as a national pro-natalist policy by the Japanese Ministry of Health. The Plan aimed to increase the fertility rate after the 1989 shock of the lowest total fertility rate (TFR) of 1.57. Japan's government offered incentives such as the provision of 3 months paid maternity leave, free pre-natal checkups, childcare nurseries subsidised by the government and a once-off cash payment to those pregnant. The program was highly ineffective as the total population followed a declining trend and the fertility rate was decreased from 1.35 children per woman to 1.3 children per woman. Furthermore, the plan was ineffective as social norms of small families were steadfast and ingrained within Japan's culture. The Angel Plan also did not provide enough childcare support as in addition to the 50,000 nurseries provided, 20,000 children were still in need of care. Ultimately it proved ineffective.