



2022 VCE Geography external assessment report

General comments

In the 2022 Geography examination, students were able to use knowledge and skills learnt during the year to respond to questions. Most students attempted the whole examination and responded comprehensively and clearly to each question. They used appropriate geographical language and stayed within the allocated time. Their use of geographical skills in the analysis of data was very good, with many students achieving excellent results. Many showed a very good understanding of the study and were able to respond in depth to questions using appropriate examples, case studies and evidence. However, students who focused only on stating content related to a topic rather than addressing the salient elements of the question were not always able to show what they knew in a clear and coherent manner.

Areas of strength:

- evidence of a sound understanding of outcomes in both Units 3 and 4 with a focus on selecting appropriate content
- appropriate responses to each question, often with examples and elaborations that were relevant and detailed, incorporating relevant data, case studies and evidence
- the ability to analyse the provided data and use evidence from the data book in responses
- the confidence displayed by most students when using geographical language or geographical data in their answers
- identifying key command terms, which enabled students to address the specific geographic requirements of a question and structure their responses accordingly.

Areas for improvement:

- Students are encouraged to read each question thoroughly, identifying and highlighting or noting key terms and directions in the questions.
- Students are encouraged to draw on connections between specific dot points and statements in the study design and the examination questions, where appropriate.
- Where questions ask students to refer to a figure it is essential that specific quantification from the figure is provided. This can then be elaborated upon where appropriate.
- Students should focus on the key components of the question and plan their responses in order to respond to a higher-order question in a succinct manner, rather than incorporating all content.

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 1

Marks	0	1	2	3	4	5	6	Average
%	6	7	17	17	20	16	18	3.6

The response required a description of two natural characteristics of the Kennicott Glacier:

- an identification of the natural characteristic (e.g., the glacier is very long)
- an elaboration (e.g., stretching over 40 km) specific to the Kennicott Glacier with specific location/evidence from Figure 1 and quantification (e.g., from its source near Mt Blackburn to its terminus).

Possible responses included:

- source: in the vicinity of Mt Blackburn at over 6000 feet
- snout or terminus: north of McCarthy settlement
- length: approx. 40 kilometres
- direction of flow: south to south-east
- width: approx. five kilometres in the middle reaches
- contributory glaciers: e.g., Gates Glacier from the northeast
- crevasses: numerous on the sides of the glacier
- meltwater: from the snout to the Nizina River
- height changes/topography: Mt Blackburn (16 528 feet) to near McCarthy, less than 3000 feet
- other characteristics, if interpreted from the map, may be acceptable.

Answers showed an understanding of topographic maps and of the natural characteristics of glaciers. While most responses were able to identify geographic characteristics from the topographic map, the requirement was for geographic characteristics of the glacier. A careful reading of the question and annotating or highlighting this component of the question would have helped students identify this requirement.

Question 2

Marks	0	1	2	3	4	5	6	7	8	Average
%	3	3	9	14	19	19	16	10	7	4.6

The response required an evaluation of the use and effectiveness of a specific geospatial technology in assessing and managing changes in ice sheets and glaciers at a selected location. Responses needed:

- to identify a specific geospatial technology and elaborate on the use of the geospatial technology such as the time period involved and the scale, combined with other assessment methods
- an assessment of changes that have occurred in ice sheets and glaciers at the selected location
- a description of management of changes in ice sheets and glaciers and effectiveness of the specific geospatial technology at the selected location
- an evaluation of the effectiveness of the geospatial technology at the specified location.

Most students had a very good understanding of a specific geospatial technology relevant to managing changes in ice sheets and glaciers at a specific location. However, the response needed to go beyond a description of the geospatial technology and focus on evaluating the effectiveness of the technology in the selected location. High-scoring responses were able to do both.

Question 3a.

Marks	0	1	Average
%	37	63	0.7

Using geographical skills, the percentage of land needed to be estimated. The response required an answer within the range of 5 to 10 per cent. No other responses were accepted. Most students were able to identify the appropriate range.

Question 3b.

Marks	0	1	2	3	4	5	6	Average
%	3	4	6	10	18	23	35	4.5

A description of the strength of the spatial association between regions that are at least 1500 m above sea level and regions that have experienced forest loss between 2000 and 2015 was required. The inclusion of a minimum of two examples (these may include an exception) that were clearly located and linked to the stated spatial association was also expected. Reasons for the spatial association were not expected to be included and could not be drawn from the data provided.

Most students were able to respond well to the question, describing the strength of the spatial association and including two examples. The conceptual understanding of spatial association was strong and the use of evidence from Figure 2 to support the discussion equally highlighted strong geographic skills in data interpretation.

Question 4

Marks	0	1	2	3	4	5	6	7	Average
%	2	2	7	19	22	22	15	11	4.4

The response needed to explain two interconnecting causes of deforestation that have occurred at a selected location.

The response required a range of components, including:

- a statement of a correct location such as a country, region and forest and reason for the deforestation
- appropriate elaboration in the form of data / specific facts related to the two reasons for the deforestation
- a specific statement on the interconnection between the two causes. The concept of feedback mechanisms in the interconnection could be incorporated into this component of the response.

Most students were able to identify two causes of deforestation at a selected location with answers showing strong knowledge of the case study. However, not all students explained the interconnection of the causes, with some answers stating two separate causes that had no interconnection. Responses tended to highlight the complexities of deforestation and often identified interconnecting causes related to human activities, social components and economic causes. Specific evidence was usually provided in response to this question.

Question 5a.

Marks	0	1	2	3	Average
%	5	19	34	42	2.1

The response required a statement of the land use change and its relationship to the research question.

Students responded well to this question and were able to identify a land use change and research question. However, the interconnection between the two was not always evident.

Question 5b.

Marks	0	1	2	Average
%	9	26	64	1.6

In outlining a time sequence, at least two dates or time periods were required. Alternatively, a date and corresponding land use change could have been described. The essential component was a timeline of land use change and not a timeline of events occurring from a historic perspective, which some responses had.

It is important for students to read the whole question and look at the marks allocated. Many students produced a very detailed timeline, which was not required for a 2-mark question. Some students detailed a timeline with the key information embedded and this was acceptable.

Question 5c.

Marks	0	1	2	3	4	5	6	7	Average
%	3	3	9	16	17	26	14	11	4.3

The question required an evaluation of how either primary sources or secondary data helped to answer the research question that had been referred to in part a. To respond appropriately, at least two primary or secondary sources needed to be stated and elaborated upon.

Most students were able to respond well to the question with detailed understanding of their fieldwork, land use change and research question. Higher-scoring responses stated how a combination of primary or secondary sources helped to answer the fieldwork question. This could be in the negative, such as there were components missing or not incorporated. They also presented a clear evaluation that was directly related to the fieldwork conducted and not simply a generalised statement on the usefulness of the primary or secondary source.

Some responses used both primary and secondary sources. In this case, only the first source was accepted, as the question required only one of either primary or secondary sources. Many responses had more than two sources, which when combined, helped answer the question. This was also acceptable.

Students are reminded to make specific references to the fieldwork and land use change rather than generalised statements on how primary sources or secondary data might help answer the fieldwork question.

Question 6a.

Marks	0	1	2	3	4	5	6	Average
%	1	1	4	4	23	18	49	5.0

Students needed to compare the contribution to the global population in 1950 and the contribution to the global population projected for 2050 for two age groups: 0–14 and over 60. Reasons for the contribution were not part of the question and no marks were awarded for these. The response could focus on 1950 and then 2050 but needed to include a comparison of both age groups. For example:

‘In 1950 the 0–14 group made the second smallest contribution of 34% or just under one billion. By 2050 this group will be 21% of the global population but will total almost two billion, around double that of 1950.’

The question was answered very well with nearly half the responses obtaining full marks, reflecting the strong ability of students to use geographic skills in the interpretation and analysis of data.

Question 6b.

Marks	0	1	2	3	4	5	6	Average
%	2	3	11	14	27	19	24	4.1

The response required a description of both the 1950 population profile and the projected 2100 profile. Reasons for the shape were not required. The description required reference to the overall shape, pattern or stage of the Demographic Transition Model (DTM), with elaboration specific to an age group alongside some quantification from the graphic for each of the 1950 population and then the 2100 population. Higher-scoring responses referred to the DTM in which the 1950 and then the 2100 profile were representative. While the question did not ask for it, some responses made comparisons between the two years and this was acceptable.

For example, 1950 indicates a young population with the largest group, 0–4, totaling over 300 million males and females. Subsequent age groups are smaller, producing a narrow peak in the 80–84 group that appears to be less than 20 million. In the DTM this structure would be Stage 2, perhaps late Stage 1.

Student responses were very good, with most students scoring in the higher range. They demonstrated a clear understanding of the population dynamics occurring over time and were able to use geographic skills in responding to the question.

Question 7a.

Marks	0	1	2	3	4	Average
%	14	16	34	22	14	2.1

Question 7b.

Marks	0	1	2	3	4	Average
%	8	16	33	25	19	2.3

Students needed to explain how international migration contributed to population change in one selected country of origin (part a.) and in one selected country of destination (part b.). The response required correctly identifying a country (the same country could be used in both parts but this needed to be clear in the response). The scale of the migration covered needed to be identified, such as 30 per cent of the total population, and the age/time of life of the migrants included. The latter could be, but was not limited to, one or two of the following:

- young, such as those nearing the age to marry, have children, or those who would add to or subtract from the working age population
- middle age, such as those who would add/subtract to the working age population and/or become part of the ageing population; contributing to brain drain syndrome and loss of people in rural regions
- singles who would create an imbalance in gender ratio; have a negative impact on birth rates and young population; add/subtract to the working population
- short-term migration, such as those moving for work, returning home before ageing and those with families
- long-term migration, such as those who can add substantially to ageing if earlier arrivals/departures were in one main period.

The response required specific elaboration and/or data relevant to the specific country chosen rather than a generalised statement on migration. Many students chose two countries, but some responses were quite generalised, with a focus on how international migration has contributed to population change at an unspecified country of origin or destination.

Question 8

Marks	0	1	2	3	4	5	6	7	8	9	10	Average
%	7	3	7	10	13	14	15	13	10	5	4	5.1

Students were required to outline two strategies that have been developed in response to an issue of a growing population in a selected country. Students were then required to discuss either the environmental, economic or social impacts that have resulted from these two strategies.

Key elements of the response included:

- a clearly growing population with a stated time period
- at least two impacts (either environmental, economic or social) of the two strategies in relation to the issue
- a clear description of issues associated with the impact(s)
- use of specific and appropriate data/elaboration to support the discussion
- appropriate geographical language.

The question was marked holistically using the assessment criteria as indicated on page 16 of the examination answer booklet. Most students were able to identify two strategy responses that were appropriate to a growing population and describe their impact with a focus on the key area of environmental, economic or social impact.

Higher-scoring responses showed comprehensive and effective application of geographical knowledge of the two strategies and excellent understanding of the issue(s) and impacts. They wrote clearly and provided relevant description and application of key geographical concepts with widespread and effective interpretation and analysis of data to support their discussion points. The highest-scoring responses were succinctly able to use geographic language in the discussion and incorporate appropriate examples and relevant data.

Some responses lacked depth and tended to be a more generalised discussion of impacts rather than the specific impacts on the specified country. In this question, it was important to include evidence by using specific and relevant data relating to the growing population. Responses that did so met the criteria to a greater extent, while more generalised responses did not meet the criteria.

An area for improvement is the specific knowledge of content, through specific data, of the growing population case study that could be drawn upon under examination conditions.

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

The family planning 202 policy has been developed to respond to the issue of overpopulation resulting from the rapidly growing population in Niger. This policy aimed to increase contraception prevalence in the country to 50% from its initiation in 2012. This was planned to be accomplished by promoting contraceptive use in communities throughout Niger and ensuring an adequate supply of contraception was available to the people. By doing so the Nigerian government hoped to reduce the fertility rate of 7.1 from the response, thus decreasing the amount of people born in Niger and the strain of food resources as a result of this. A second strategy developed to respond to this issue and challenge of Niger's growing population is Husband School's. These school's are located in over 130 communities in Niger, involving multiple groups of 12 men who discuss and are educated on contraceptive practices. Likewise to the Family Planning 2020 policy, the implementation of Husband Schools by the Nigerian government aimed to address Niger's rapid population rise of 140 million more people by 2100 by forgetting the country's high fertility rate of over 7.1 and birth rate of 154 for every 1000 live births. From these two strategies a number of social impacts have arisen. For

Instance, in 2017 alone the Family Planning 2020 policy is thought to have prevented over 980 maternal deaths and 234,000 unwanted births alone though the increase of contraception supply the policy fostered. Furthermore, the Husband Schools increased the percentage of safe births by 21% in one coming from 2008 to 2010 and from 12% to 41% in another community in the region of Maradi from 2013 to 2015. This displays the beneficial social impacts these two strategies have had in Niger responding to the issue of overpopulation, caused by the country's growing population.

Question 9

Marks	0	1	2	3	4	5	6	7	8	9	10	Average
%	3	5	9	14	16	13	13	11	7	5	3	4.9

Students were required to reference a selected country and then explain how the impacts of the ageing population and the challenges that result from these impacts may be distributed unevenly. The focus here was on the uneven distribution of the impacts of the challenges of an ageing population.

Key elements of the response included:

- an appropriate choice of country
- elaborate explanation of the impacts related to the aged (e.g., health services, pensions, social) that were clearly related to the selected country
- challenges stated, such as the development of infrastructure, replacement workforce, financial provision within local and national budgets or other appropriate challenges
- responses unique to the selected country
- distribution in this case does not necessarily need to be spatial; it may be between age groups or genders or ethnicity and some responses did reflect a range of distributions.

The question was marked holistically using the assessment criteria as indicated on page 16 of the exam answer booklet. Higher-scoring responses showed comprehensive and effective application of geographical knowledge of the impacts of an ageing population and associated challenges of an uneven distribution. They also provided clear and relevant description and application of key geographical concepts as well as widespread and effective interpretation and analysis of relevant data to support their discussion points.

Students were generally able to identify an ageing population and describe the elements of ageing of that population. The impacts of the ageing population and/or the challenges associated with the impacts were often clearly described. The ability to then interconnect this with the distribution of the impacts either spatially or on a particular age group or other appropriate distribution was not as evident. These responses required expansion.

Improvements could be made by using the key components of the question before responding, in order to plan out the approach. Planning was evident in higher-scoring responses where students were able to address all elements of the question.

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

In Germany the impacts of a decreasing economically active population and a high proportion of the population above the age of 65 along with the subsequent challenges of providing aged care support and revitalizing old towns as a result of the country's ageing population are distributed unevenly. This was caused by the migration of over 2 million Germans following reunification in 1989 migrating from the once Soviet held East to the West of the country. Because of this East Germany is far older than the western side of the country, containing 19 of the 20 older districts in Europe alone. Thus, the impacts of a reducing economically active population and a high proportion of people aged above 65

are distributed more so in Eastern Germany. The town of Saxony-Anhalt for example is projected to lose over 10.6% of its population by 2040, with 80% of the 1200 residents over the age of 65. In addition, over 300,000 of Germany's economically active population are set to leave the workforce by the end of 2022, with 32% of these occurring solely in 12 towns throughout Eastern Germany such as Gorbitz, highlighting how the impacts of Germany's ageing population are distributed more so in the East. Furthermore, the subsequent challenges of these impacts are also felt majorly in the East of the country. For example the challenge of providing aged care in Germany has seen a shortage of over 15,000 aged care workers which are required throughout Germany, however, while the average aged care vacancy has taken 52 days to fill in Munich, located in Western Germany, the same aged care vacancy has taken 171 days to fill on average in 6 of the districts in Eastern Germany. Moreover, revitalizing old cities, another challenge of Germany's aging population, is solely located in the East of the country. In Gorbitz the government of Germany has began in 2018 offering 1000 euros per month to those who are willing to move to and live in the slowly de-populating city, located in Eastern Germany. Therefore, the impacts and challenges of Germany's ageing population are distributed unevenly, more so in the East of the country, showing how the impacts and challenges of other countries facing ageing populations may be distributed unevenly as well.