



NSW Education Standards Authority

This sample HSC examination paper is designed to show one way the Geography syllabus could be examined. It reflects the layout of a formatted HSC examination paper.

The structure of the Geography HSC examination has changed. Section I is now worth 15 marks. Section II is worth 45 marks. Section III contains a structured extended-response question worth 20 marks and Section IV contains an extended-response question worth 20 marks. All questions are compulsory and there are no optional extended-response questions.

Sample HIGHER SCHOOL CERTIFICATE EXAMINATION

Geography

General Instructions

- Reading time – 10 minutes
- Working time – 3 hours
- Write using black pen
- Calculators approved by NESA may be used
- A Stimulus Booklet is provided with this paper

Total marks: 100

Section I – 15 marks (pages 3–7)

- Attempt Questions 1–15
- Allow about 30 minutes for this section

Section II – 45 marks (pages 8–16)

- Attempt Questions 16–20
- Allow about 1 hour and 20 minutes for this section

Section III – 20 marks (page 17)

- Attempt Question 21
- Allow about 35 minutes for this section

Section IV – 20 marks (page 18)

- Attempt Question 22
- Allow about 35 minutes for this section

The questions in Sections III and IV could be based on stimulus material. One section will examine Rural and urban places and the other section will examine Ecosystems and global biodiversity.

The first HSC examination for the revised Geography Stage 6 syllabus will be held in 2025.

The HSC Geography examination specifications can be found in the Assessment information for the Stage 6 syllabus.

This sample examination provides examples of some types of questions that may be found in HSC examinations for Geography. Each question has been mapped to show how the question relates to syllabus outcomes and content. Answers for the objective-response questions (Section I) and marking guidelines for all other questions are provided. The marking guidelines indicate the criteria for each mark or mark range.

In the examination, students will record their answers to Section I on a multiple-choice answer sheet and their answers to Section II in the spaces provided on the examination paper. They will record their responses to Sections III and IV in separate writing booklets.

The sample questions, marking criteria, sample answers and annotations provide teachers and students with guidance as to the types of questions to expect and how they may be marked. They are not meant to be prescriptive. Each year the structure of the examination may differ in the number and types of questions, or focus on different syllabus outcomes and content.

Note:

Comments in coloured boxes are annotations that provide guidance for future examinations.

Section I

15 marks

Attempt Questions 1–15

Allow about 30 minutes for this section

Refer to the Stimulus Booklet

Use the multiple-choice answer sheet for Questions 1–15.

- 1** Which of the following types of map is used to show the movement of people and goods between different areas?
- A. Cadastral
 - B. Flowline
 - C. Isoline
 - D. Précis

Refer to Source A in the Stimulus Booklet to answer Questions 2–3.

- 2** What settlement pattern can be seen in the urban precinct shown?
- A. Dispersed
 - B. Linear
 - C. Nucleated
 - D. Radial
- 3** To prepare a submission to the local council about the challenges of living in this city, a resident could best use Source A to
- A. create an annotated sketch map.
 - B. calculate the elevation of features.
 - C. identify public and private landuses.
 - D. describe the biophysical environment.

Refer to Source *B* in the Stimulus Booklet to answer Questions 4–5.

4 What is the temperature range shown?

- A. 9°
- B. 11°
- C. 72°
- D. 74°

5 What is the approximate average rainfall for winter?

- A. 50 mm
- B. 70 mm
- C. 170 mm
- D. 200 mm

6 A grandparent recalls their local evergreen forest as a 10 km² habitat with 20 native plant species. Their grandchild assumes conditions have not changed, but the forest now covers 5 km² and supports only 10 native plant species.

This scenario is an example of which geographical concept?

- A. Overview effect
- B. Shifting baselines
- C. Ecological integrity
- D. Dynamic equilibrium

7 Which of the following are actions that aim to achieve ecological sustainability, listed from a local scale to a global scale?

- A. Reforestation project in Iceland, recycling program in Tokyo, Worldwide Fund for Nature (WWF) biodiversity projects
- B. United Nations Sustainable Development Goals (SDGs), Australian legislation on fishing quotas, council recycling program
- C. Social justice protest march in London, electric vehicle production in Korea, United Nations Environment Program (UNEP)
- D. Rural windfarm initiative in eastern Tasmania, carbon capture projects in Europe, United Nations Decade on Ecosystem Restoration

Refer to Source *C* in the Stimulus Booklet to answer Question 8.

- 8** Which age group has the greatest difference in the percentage of the female population living in agricultural regions compared to the state as a whole?
- A. 20–29
 - B. 30–39
 - C. 50–59
 - D. 60–69

Refer to Source *D* in the Stimulus Booklet to answer Questions 9–10.

- 9** What land cover is found 10 kilometres from Useless Loop (AR 7410) at a bearing of 170 degrees?
- A. Forest
 - B. Parkland
 - C. Sand ridges
 - D. Seagrass meadows
- 10** Approximately how long would it take a boat travelling at 6 km/h to travel from Eagle Bluff (AR 7511) to Useless Loop (AR 7410)?
- A. 17 minutes
 - B. 1 hour and 39 minutes
 - C. 2 hours and 45 minutes
 - D. 3 hours and 25 minutes

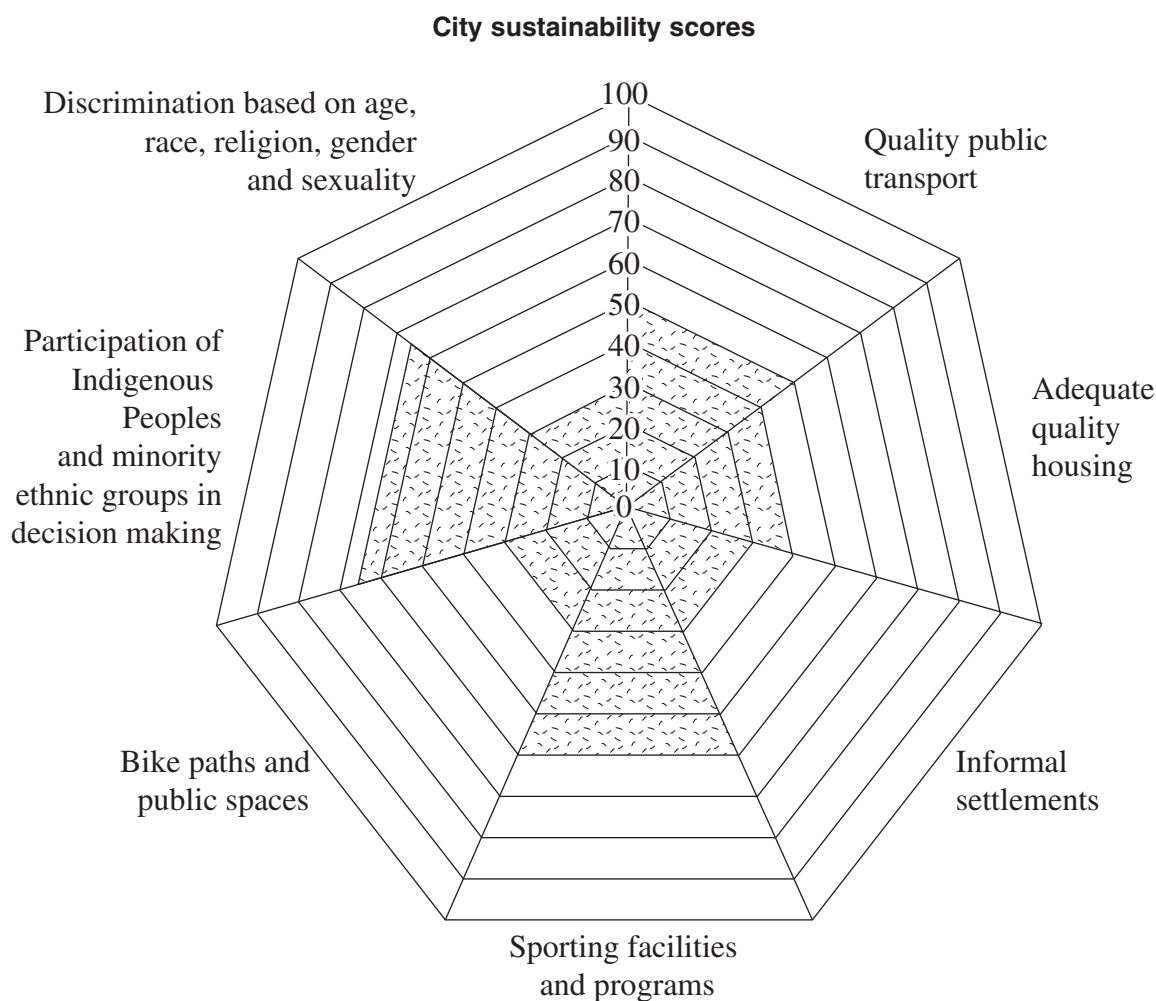
Refer to Source *G* in the Stimulus Booklet to answer Question 11.

- 11** What percentage of New Zealand’s population was living in large regional centres in 2018?
- A. 4.1%
 - B. 15.5%
 - C. 20.7%
 - D. 24.9%

Refer to Sources *H* and *I* in the Stimulus Booklet to answer Questions 12–13.

- 12** What is the dominant influence on the spatial pattern of rural and urban settlements on the South Island of New Zealand?
- A. Landuse
 - B. Land cover
 - C. Oceanity
 - D. Topography
- 13** Which of the following is an urban hierarchy on the South Island of New Zealand?
- A. Dunedin, Nelson, Queenstown, Wanaka
 - B. Christchurch, Greymouth, Invercargill, Gore
 - C. Greymouth, Timaru, Queenstown, Ashburton
 - D. Christchurch, Nelson, Alexandra, Queenstown

Refer to the diagram below to answer Questions 14–15.



© Professor Brendan F.D. Barrett (adapted)

- 14** What pillar of sustainability has been the main focus of this city’s sustainability measures?
- Cultural
 - Economic
 - Environmental
 - Social
- 15** The city performed twice as well on sporting facilities and programs as on measures related to
- human rights and illegal land use.
 - illegal land use and public transport.
 - inclusivity and outdoor recreation.
 - transport and recreational infrastructure.

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Centre Number

Geography

Section II Answer Booklet

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Student Number

45 marks**Attempt Questions 16–20****Allow about 1 hour and 20 minutes for this section**

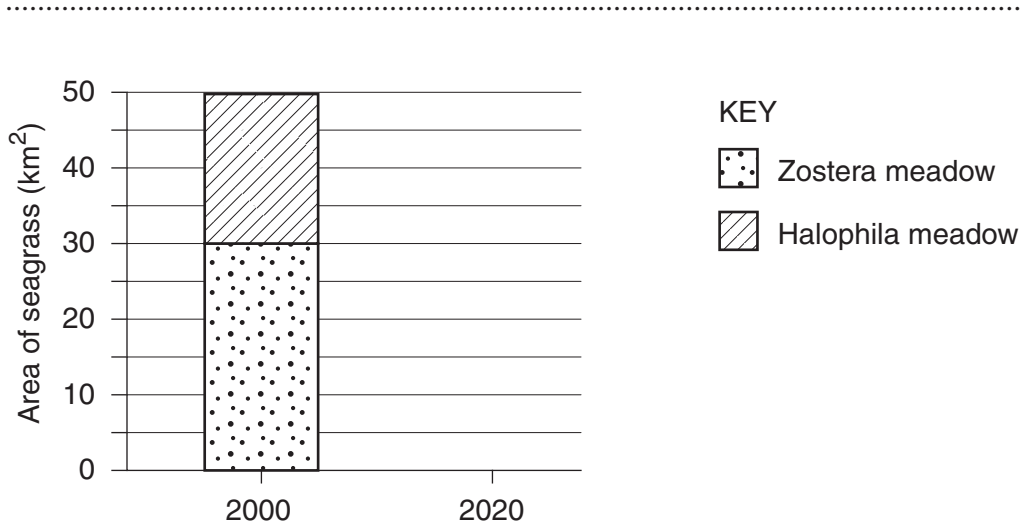
Instructions

- Write your Centre Number and Student Number at the top of this page.
 - Use the Stimulus Booklet and your knowledge of geography to answer Questions 16–20 in the spaces provided. These spaces provide guidance for the expected length of response.
 - Show all relevant working in questions involving calculations.
 - Extra writing space is provided at the back of this booklet. If you use this space, clearly indicate which question you are answering.
-

Question 16 (11 marks)

Refer to Source *J* in the Stimulus Booklet to answer part (a).

- (a) Calculate the area of seagrass meadows in 2020 and complete the graph below. **2**



Refer to Source *K* in the Stimulus Booklet to answer part (b).

- (b) Describe the changes to the biodiversity of this ecosystem over time. **3**

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Question 16 continues on page 10

Question 16 (continued)

Refer to Source *K* in the Stimulus Booklet to answer part (c).

- (c) Justify management strategies that could be used to restore this seagrass ecosystem to a healthy and productive state. In your response, refer to the causes of change and ecosystem functioning.

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End of Question 16

Question 17 (8 marks)

(a) Describe the role that can be played by Indigenous Peoples in the contemporary management of ecosystems. **4**

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(b) Many medicines have been developed using Indigenous Peoples’ knowledges of the medicinal properties of plants. **4**

Explain how benefit sharing presents opportunities for the sustainable production of plant-based medicines.

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Question 19 (7 marks)

(a) Explain how ONE spatial technology tool could be used in a geographical inquiry into an urban place. **3**

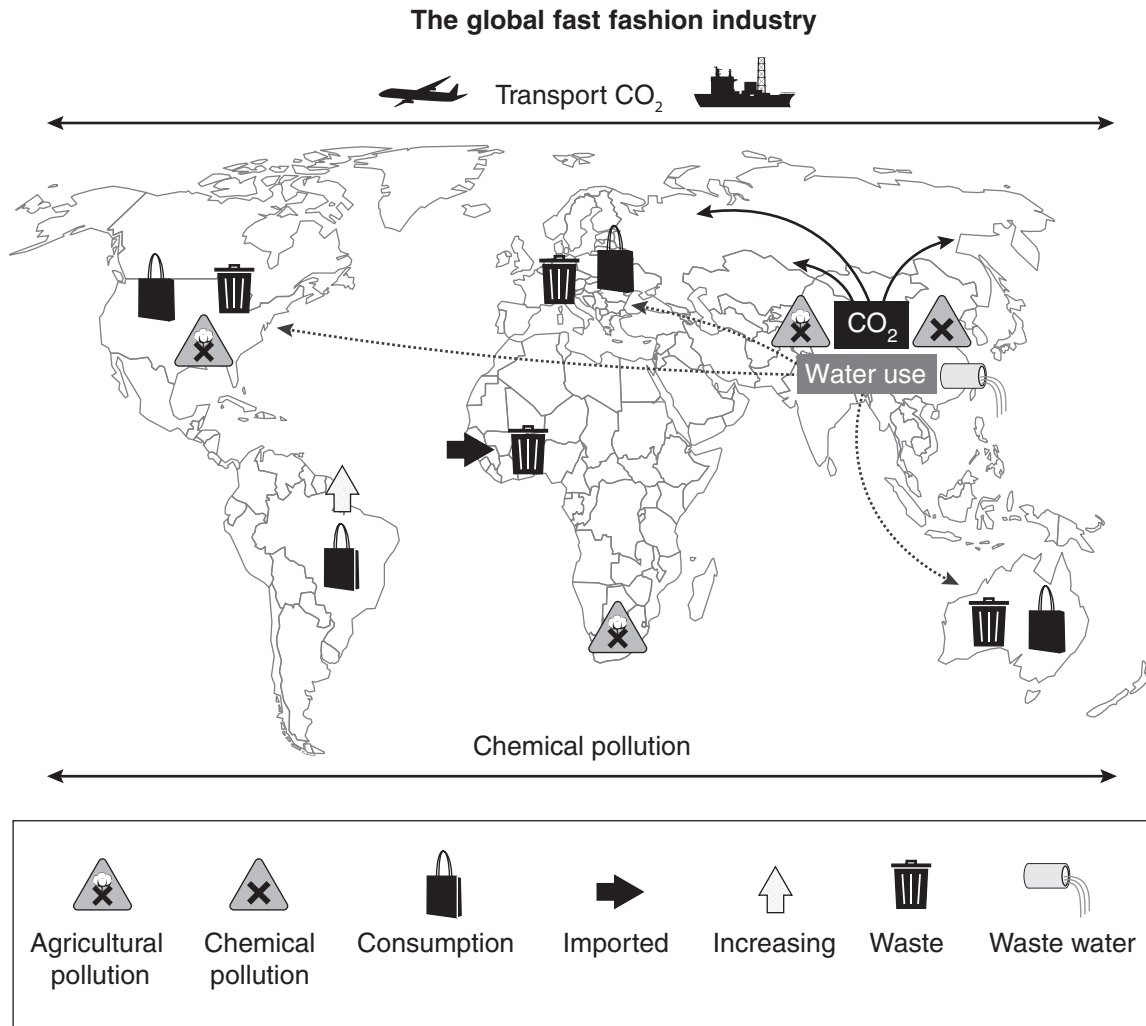
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(b) Describe TWO appropriate fieldwork techniques to use in collecting data or information on the human characteristics of urban places. **4**

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Question 20 (13 marks)

Refer to the diagram to answer parts (a)–(b).



© Acknowledgement: Nature Reviews: Earth and Environment

- (a) Describe the spatial pattern of production and consumption in the global fast fashion industry indicated in the diagram. 2

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Question 20 continues on page 15

This structured extended-response question requires students to make connections between stimulus material and places they have studied. The question parts are structured to allow students to build their understanding of an unfamiliar place and make connections between this place and other places they have studied.

Geography

Section III

20 marks

Attempt Question 21

Allow about 35 minutes for this section

Answer the question in the Section III Writing Booklet. Extra writing booklets are available.

Your answer will be assessed on how well you:

- apply geographical knowledge and understanding relevant to the question
- communicate ideas and information using geographical terms and concepts appropriately
- use relevant examples, geographical information and the Stimulus Booklet where appropriate to support the response
- present a sustained, logical and cohesive response

Question 21 (20 marks)

Refer to the information below, Sources *D*, *E* and *F* in the Stimulus Booklet to answer Question 21.

Denham is the main settlement in the Shark Bay area on the coast of Western Australia on Malgana Country. It is located 837 km northwest of Perth (25°55'S latitude). There is an average rainfall of approximately 222 mm per year with approximately 23 wet days. Denham has fewer than 1000 residents and is the main tourist centre of the UNESCO Shark Bay World Heritage Area. It provides goods and services for residents and visitors. Shark Bay attracts approximately 100 000 visitors each year, many of whom come to Wulyibidi (Peron Peninsula) to experience the wildlife, natural features and cultural tours.

- (a) Describe geographical influences that have shaped the size and character of Denham. **4**
- (b) Explain how Denham and a rural place you have studied are linked to other places at a range of scales. **6**
- (c) Compare the potential changes that could affect Denham with the changes affecting an urban place that you have studied. In your response, refer to an urban place within a larger settlement. **10**

Question 21 shows one way that the structured extended-response question could examine course content. The structured extended-response question will have two or three parts. The number of parts and the marks allocated to each part may vary from year to year.

Section IV

20 marks

Attempt Question 22

Allow about 35 minutes for this section

Answer the question in the Section IV Writing Booklet. Extra writing booklets are available.

Your answer will be assessed on how well you:

- apply geographical knowledge and understanding relevant to the question
 - communicate ideas and information using geographical terms and concepts appropriately
 - use relevant examples, geographical information and the Stimulus Booklet where appropriate to support the response
 - present a sustained, logical and cohesive response
-

Question 22 (20 marks)

Account for the differences in the management of ONE type of ecosystem at TWO different locations.

Question 22 shows one way that the requirement to compare the management of ecosystems at different locations could be examined.

End of paper

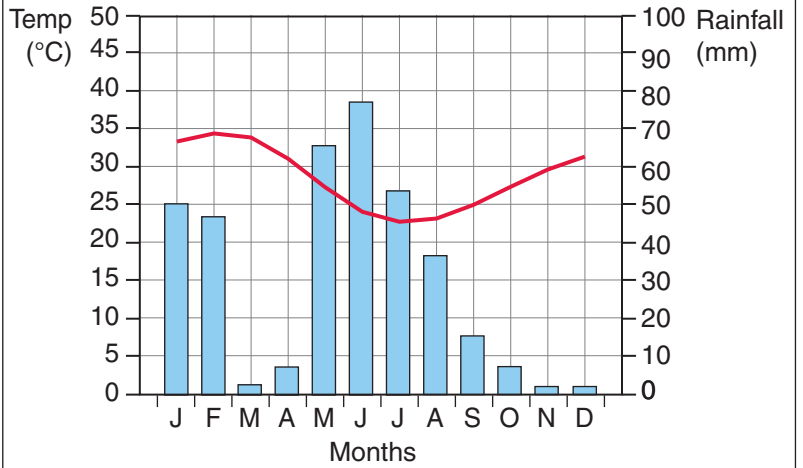
Geography – Stimulus Booklet

Source A – Aerial photograph



© Photo by Denys Nevozhai on Unsplash

Source B – Climate graph Station X

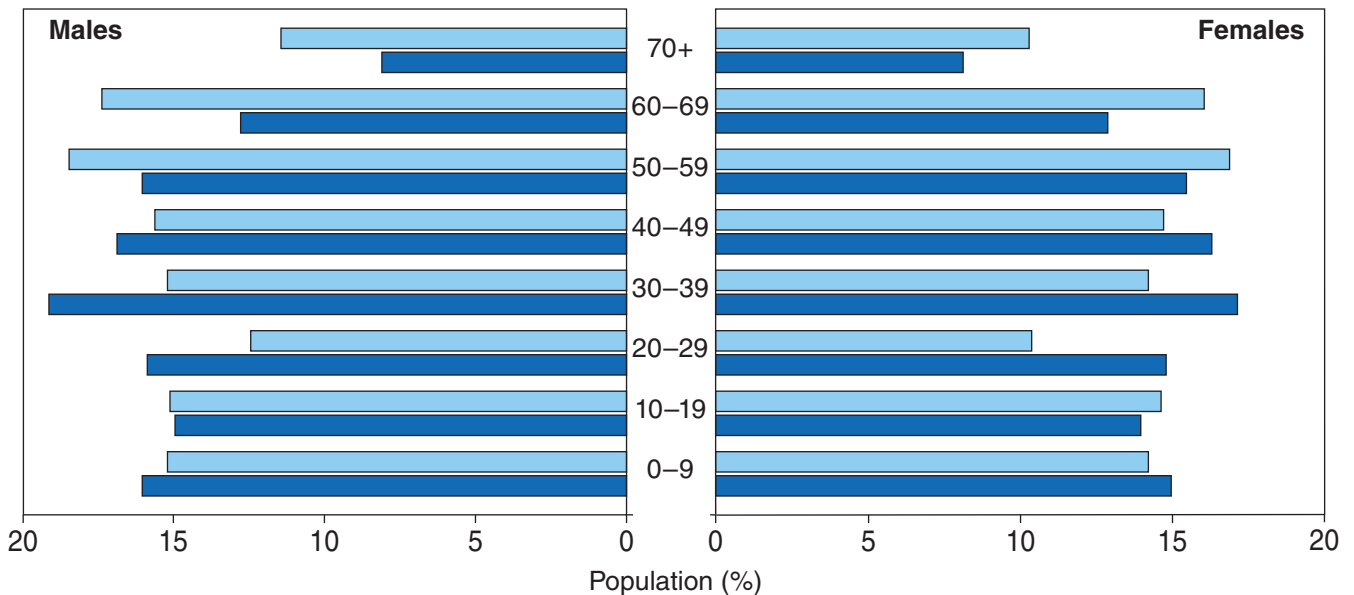


KEY

— Average daily temp

■ Average monthly rainfall

Source C – State population profile

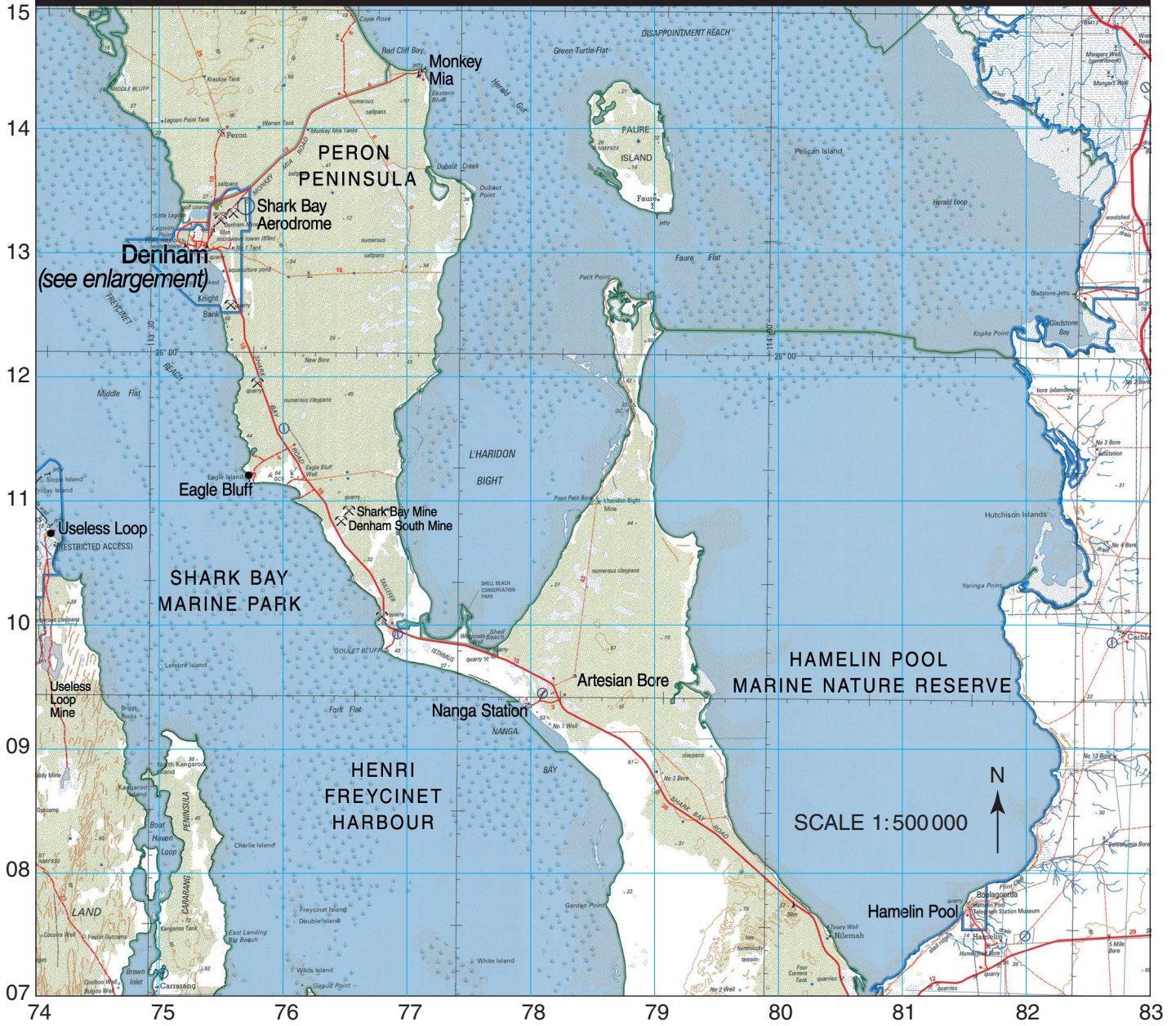


KEY

■ Agricultural region


















■ State

Source D – Shark Bay topographic map extract (Western Australia)

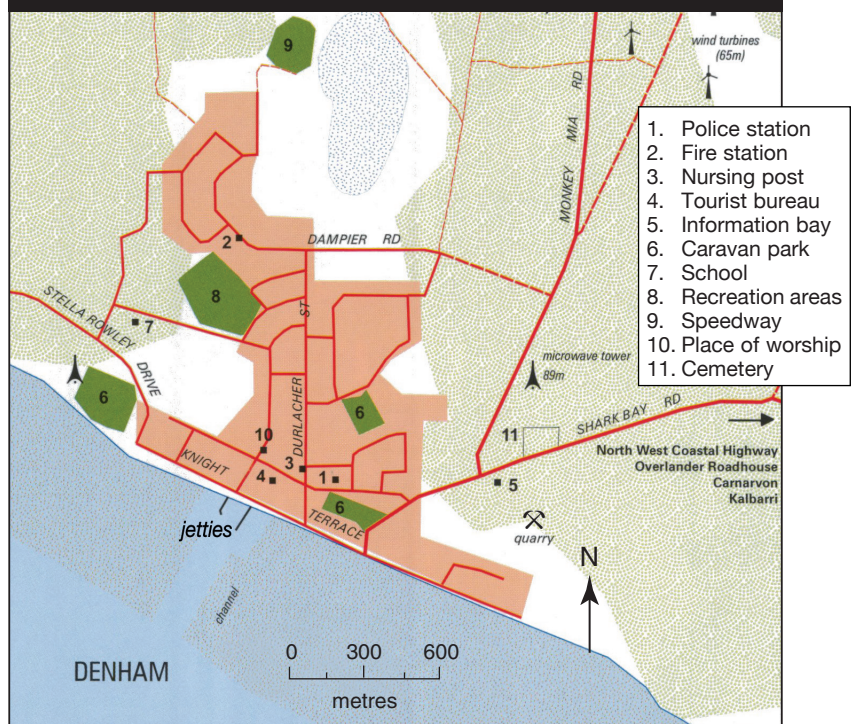


© Source: Geoscience Australia

Legend for Source D

-  Built-up area
-  Secondary road
-  Minor road (access & condition not assured)
-  Vehicle track (access & condition not assured)
-  Distance in kilometres
-  Mine
-  Airport; Landing ground
-  Homestead; Building(s)
-  Reserved area boundary
-  World Heritage Area
-  Foreshore flat
-  Jetty or pier
-  Seagrass meadows
-  Contour with value
-  Sand ridges; Pinnacle; Cliff
-  Forest, wood or shrubland: Sparse, Dense, Close
-  Urban recreation parkland

Source E – Denham map enlargement



1. Police station
2. Fire station
3. Nursing post
4. Tourist bureau
5. Information bay
6. Caravan park
7. School
8. Recreation areas
9. Speedway
10. Place of worship
11. Cemetery

Source F – Denham (photograph)



© Australia's Coral Coast

| Source G – New Zealand settlement and population data | | |
|--|------------------------------|-------------------------------|
| | <i>Number of settlements</i> | <i>Population 2018 Census</i> |
| Major urban | 6 | 2 912 526 |
| Large regional | 11 | 727 011 |
| Medium regional | 14 | 321 999 |
| Small regional | 22 | 193 164 |
| Small urban and rural | | 545 055 |
| New Zealand | | 4 699 755 |

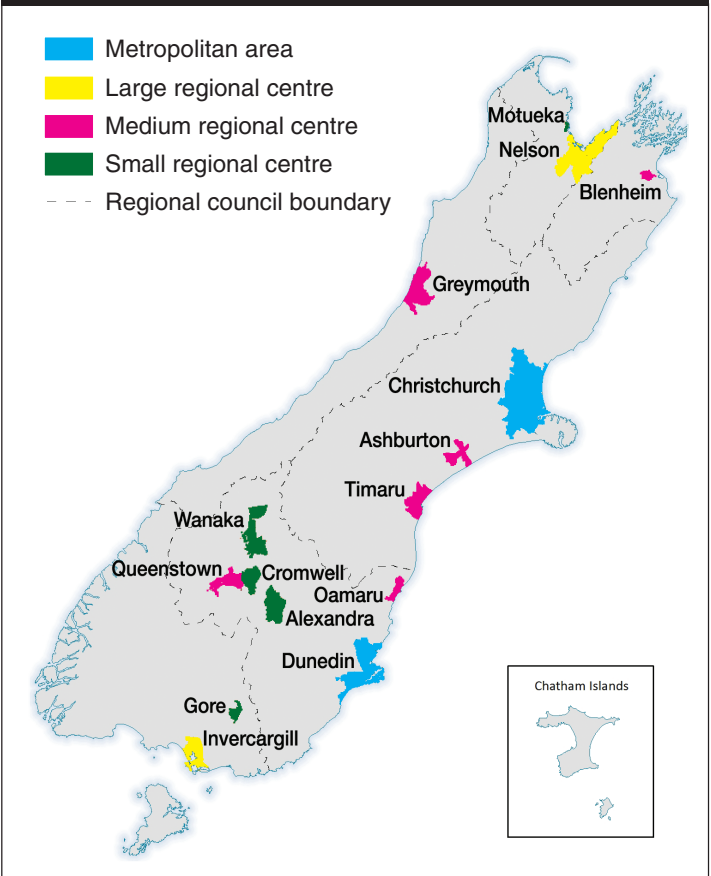
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Source H – New Zealand (Satellite image)



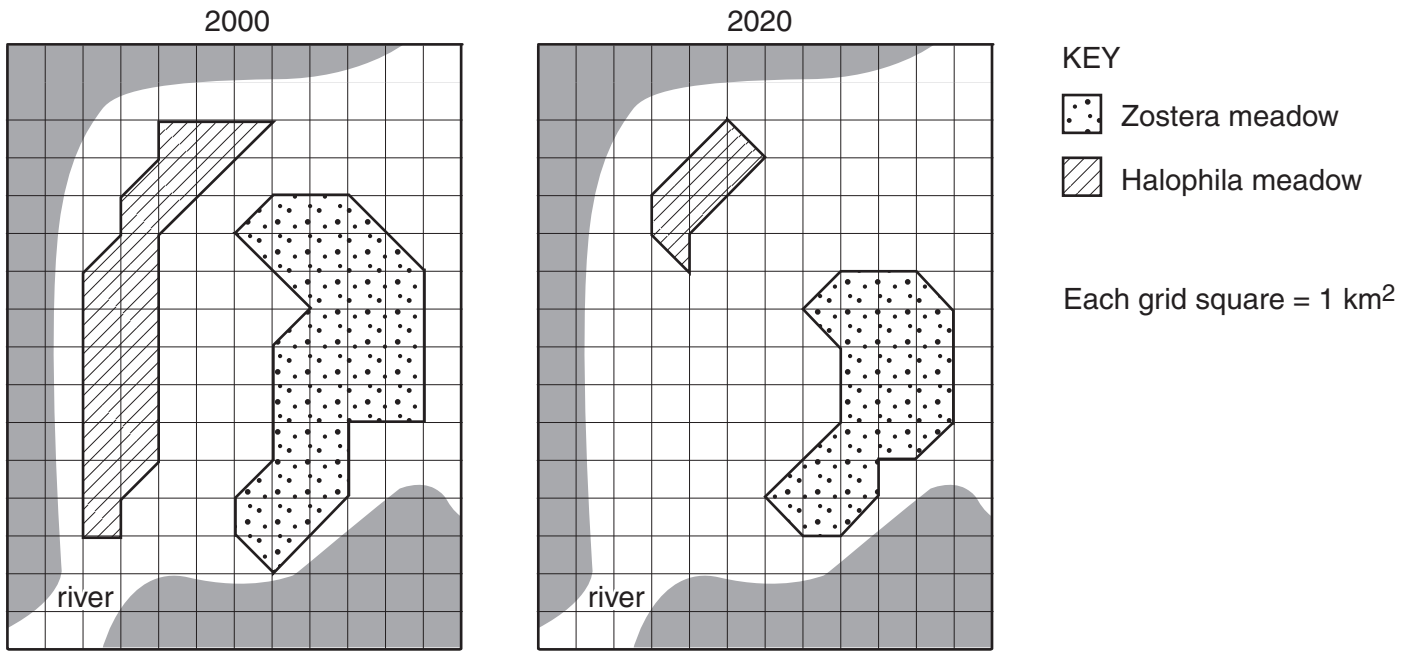
©MSchmeling – Can Stock Photo Inc.

Source I – New Zealand (South Island)



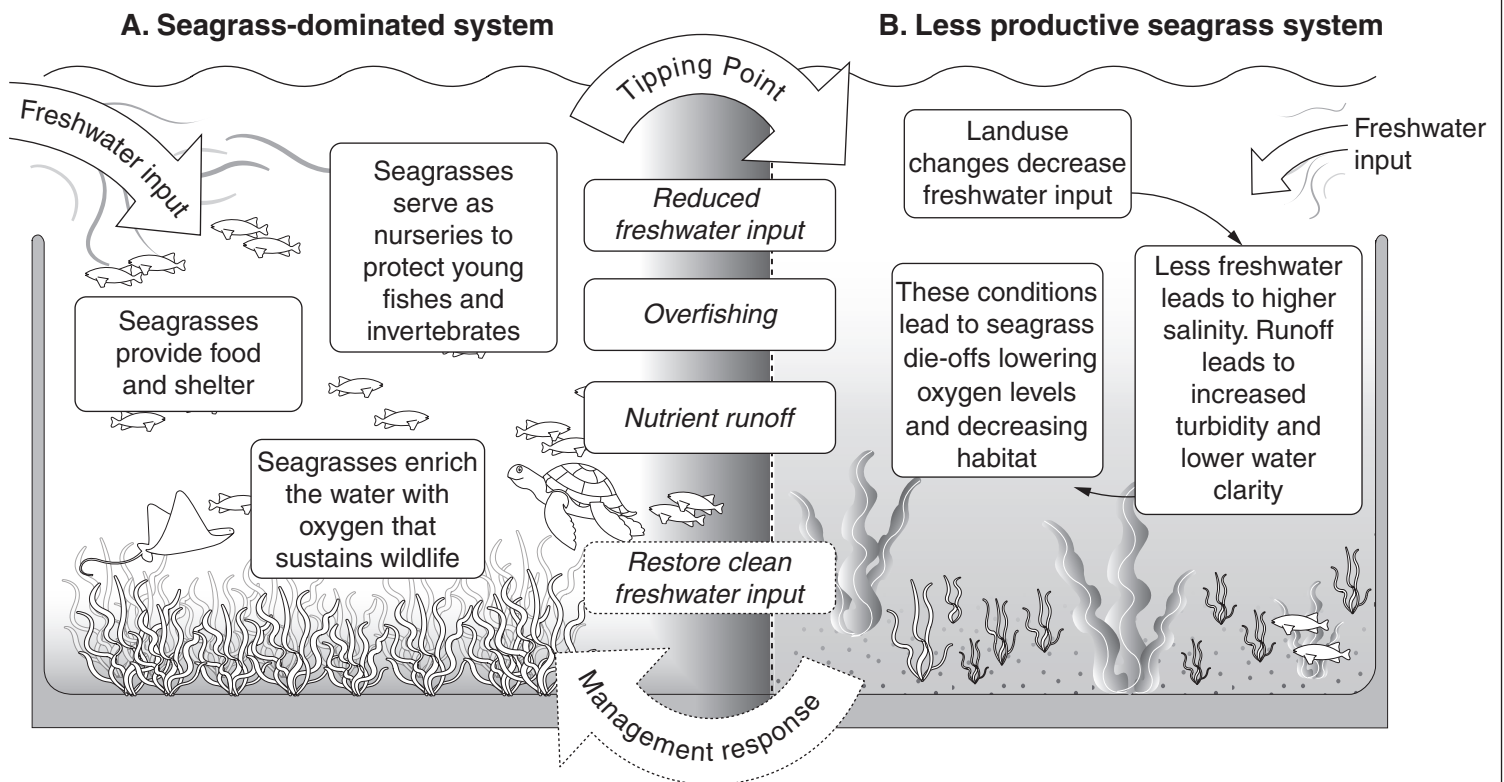
This work is based on/includes Stats NZ data which are licensed by Stats NZ for reuse under the Creative Commons Attribution 4.0 International licence.

Source J – Seagrass mapping in a coastal bay 2000–2020



© Seagrass-Watch HQ

Source K – Seagrass ecosystem surrounded by urban and agricultural landuse



Productive seagrass ecosystems rely on salinity, water clarity, and the presence of important grazers to maintain high abundance of species.

Adapted from: Ocean Tipping Points Project. Original design by Jacklyn Mandoske

HSC Geography Sample Marking Guidelines

Section I

Multiple-choice Answer Key

| Question | Answer |
|----------|--------|
| 1 | B |
| 2 | C |
| 3 | A |
| 4 | B |
| 5 | C |
| 6 | B |
| 7 | D |
| 8 | A |
| 9 | C |
| 10 | C |
| 11 | B |
| 12 | D |
| 13 | A |
| 14 | D |
| 15 | A |

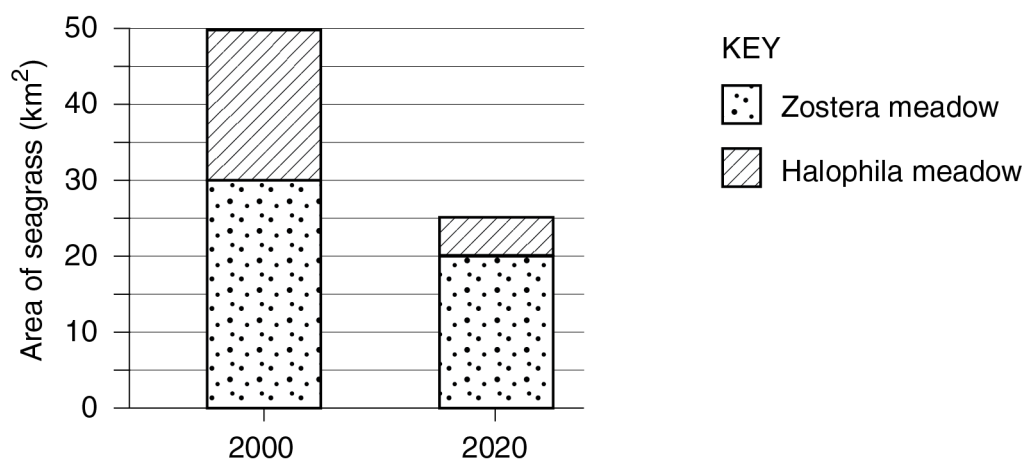
Section II

Question 16 (a)

| Criteria | Marks |
|--|-------|
| <ul style="list-style-type: none"> Correctly calculates and graphs seagrass data for 2020 | 2 |
| <ul style="list-style-type: none"> Shows some understanding of compound column graph construction using the key | 1 |

Sample answer:

There were 5 km² of Halophila and 20 km² of Zostera in 2020.



Question 16 (b)

| Criteria | Marks |
|--|-------|
| <ul style="list-style-type: none"> Provides a detailed description of changes to biodiversity over time | 3 |
| <ul style="list-style-type: none"> Describes some changes to biodiversity over time OR | 2 |
| <ul style="list-style-type: none"> Describes in detail ONE change to biodiversity over time | 1 |
| <ul style="list-style-type: none"> Makes limited reference to biodiversity change | 1 |

Sample answer:

Biodiversity has declined in both the number and variety of plants and animals. There is less seagrass (primary biomass) and the remaining seagrass is shorter and less dense, no longer covering the seabed. A non-seagrass species that appears to be kelp or seaweed has invaded the ecosystem. There are fewer fish (grazers/herbivores), and the larger marine animals, such as turtles and stingrays, from the higher trophic levels have disappeared from the food web. The result is a less complex ecosystem with less biodiversity.

Question 16 (c)

| Criteria | Marks |
|--|-------|
| <ul style="list-style-type: none"> • Demonstrates comprehensive knowledge and understanding of the causes of change and ecosystem functioning • Clearly justifies a range of appropriate management strategies that could be used to restore a healthy and productive seagrass ecosystem | 6 |
| <ul style="list-style-type: none"> • Demonstrates thorough knowledge and understanding of the causes of change and ecosystem functioning • Justifies appropriate management strategies that could be used to restore a healthy and productive seagrass ecosystem | 5 |
| <ul style="list-style-type: none"> • Demonstrates sound knowledge and understanding of the causes of change AND/OR ecosystem functioning • Describes one or more appropriate management strategies in some detail | 3–4 |
| <ul style="list-style-type: none"> • Makes some reference to change or ecosystem functioning • Outlines a management strategy | 2 |
| <ul style="list-style-type: none"> • Provides some relevant information | 1 |

Sample answer:

The seagrass ecosystem was pushed to a tipping point by reduced freshwater flows, overfishing and increased nutrient and sediment flows from agriculture and urban development.

Restoring freshwater flows could be achieved by reducing water diverted for urban or agricultural use, for example by growing non-irrigated crops or increasing environmental flows from rivers. Restoring freshwater flows will assist ecosystem functioning by restoring salinity to levels needed for high primary productivity.

Channelling runoff through better urban stormwater design and capturing agricultural runoff for treatment would improve water clarity. For example, using constructed wetlands and rain gardens could intercept sediment and nutrients. Clear water will help restore energy flows by allowing sunlight to penetrate for high primary productivity. Healthy, productive seagrass will support the return of grazers (fish) and species at higher trophic levels.

Restricting fishing activities to allow species to regenerate naturally as seagrasses return would help restore the food web.

Question 17 (a)

| Criteria | Marks |
|--|-------|
| <ul style="list-style-type: none"> Provides characteristics and features of the role that can be played by Indigenous Peoples in the contemporary management of ecosystems | 4 |
| <ul style="list-style-type: none"> Provides some characteristics and features of the role that can be played by Indigenous Peoples in the contemporary management of ecosystems | 3 |
| <ul style="list-style-type: none"> Demonstrates a basic understanding of the role that can be played by Indigenous Peoples in the contemporary management of ecosystems | 2 |
| <ul style="list-style-type: none"> Provides some relevant information | 1 |

Sample answer:

Many Indigenous cultures have strong connections with, and a deep understanding of, the land and how to manage and care for it which stem from knowledge passed down for thousands of years. Indigenous Peoples can play an important role in the contemporary management of ecosystems through consultation and joint decision-making. Indigenous Peoples' knowledges and approaches can be incorporated into contemporary management strategies to enhance sustainability. Strategies such as closed seasons, sustained burning and having protected species are examples of Indigenous Peoples' customary management approaches which have been adapted into contemporary ecosystem management.

Question 17 (b)

| Criteria | Marks |
|---|-------|
| <ul style="list-style-type: none"> Demonstrates a thorough understanding of how benefit sharing presents opportunities for the sustainable production of plant-based medicines | 4 |
| <ul style="list-style-type: none"> Demonstrates a sound understanding of how benefit sharing presents opportunities for the sustainable production of plant-based medicines | 3 |
| <ul style="list-style-type: none"> Demonstrates a basic understanding of how benefit sharing presents opportunities for the sustainable production of plant-based medicines | 2 |
| <ul style="list-style-type: none"> Provides some relevant information | 1 |

Sample answer:

Benefit sharing agreements provide for the ongoing and equitable distribution of benefits arising from the sharing of knowledges, practices and resources. Indigenous Peoples' sharing of knowledges and practices with research institutions or medical companies could result in advancements in treatments and an increased awareness of sustainable production methods to ensure ongoing availability of raw materials. Research institutions could learn from Indigenous Peoples' methods of cultivating plants and transferring raw materials into treatments, and medical companies could share production technologies to enhance efficiency. Economic benefits of these agreements could include supply contracts and corporate partnerships.

Question 18

| Criteria | Marks |
|--|-------|
| <ul style="list-style-type: none"> • Demonstrates a comprehensive understanding of sustainable management of a rural or urban place • Clearly explains how ONE initiative or project has led to sustainable management | 6 |
| <ul style="list-style-type: none"> • Demonstrates a thorough understanding of sustainable management of a rural or urban place • Explains how ONE initiative or project has led to sustainable management | 5 |
| <ul style="list-style-type: none"> • Demonstrates sound understanding of sustainable management of a rural or urban place • Describes how ONE initiative or project has led to sustainable management | 4 |
| <ul style="list-style-type: none"> • Demonstrates a basic understanding of sustainable management of a rural or urban place • Outlines how ONE initiative or project has led to sustainable management | 3 |
| <ul style="list-style-type: none"> • Demonstrates a limited understanding of sustainable management or of an initiative or project | 2 |
| <ul style="list-style-type: none"> • Provides some relevant information | 1 |

Sample answer:

Boco Rock Wind Farm, in Nimmitabel NSW, is an example of a project which has led to sustainable management as it provides clean and sustainable energy for this community. Stage One of the wind farm consists of 67 turbines, generating 113 MW of renewable energy. The turbines capture the kinetic energy of the wind and convert it into electricity as the shaft drives the generator, thus creating sustainable energy production. Boco Rock Wind Farm also uses a community engagement strategy that attempts to make a contribution to the local and wider community. It provides employment and infrastructure, such as new roads, to the rural community. The project is delivering clean and sustainable energy to the local area. This is an example of sustainable management, as it provides the energy needs for communities and lowers the ecological footprint.

Question 19 (a)

| Criteria | Marks |
|--|-------|
| <ul style="list-style-type: none"> • Correctly identifies a spatial technology tool • Provides a detailed explanation of how AND why the spatial technology tool would be used during a geographical inquiry | 3 |
| <ul style="list-style-type: none"> • Correctly identifies a spatial technology tool • Describes how OR why the spatial technology tool would be used during a geographical inquiry | 2 |
| <ul style="list-style-type: none"> • Provides some relevant information about geographical inquiry AND/OR spatial technology tools | 1 |

Sample answer:

To begin the inquiry, Google Earth Pro could be used to zoom in and view at different scales – for example from citywide, to a suburb or community and then to street level. This would enable the identification of physical and human characteristics such as the location of a suburb or precinct in a city, building density, facilities and services. The tools in Google Earth could be used to measure distances, to calculate area and identify changes over time.

Question 19 (b)

| Criteria | Marks |
|---|-------|
| <ul style="list-style-type: none"> • Describes TWO appropriate fieldwork techniques that could be used to collect data or information on human characteristics of urban places | 4 |
| <ul style="list-style-type: none"> • Describes ONE appropriate fieldwork technique that could be used to collect data or information on human characteristics of urban places • Outlines one other technique that could be used | 3 |
| <ul style="list-style-type: none"> • Outlines TWO appropriate fieldwork techniques that could be used to collect data or information on human characteristics of urban places <p>OR</p> <ul style="list-style-type: none"> • Describes ONE appropriate fieldwork technique that could be used to collect data or information on human characteristics of urban places | 2 |
| <ul style="list-style-type: none"> • Provides some relevant information | 1 |

Sample answer:

One fieldwork technique could be conducting a survey to gather information from residents of the place. Survey questions can provide quantitative human data such as age, gender, type of employment and distance travelled to work and qualitative information such as how safe they feel, access to services and facilities, opinions about liveability, happiness and issues of concern. Quantitative data can be graphed.

Another technique could be taking photographs at different locations to illustrate human characteristics of an urban place such as transport infrastructure, types of housing, shops and facilities such as schools and hospitals. Human challenges such as urban decay can be captured in photographs.

Question 20 (a)

| Criteria | Marks |
|--|-------|
| <ul style="list-style-type: none"> Accurately describes the spatial distribution of production and consumption in the global fast fashion industry illustrated in the diagram | 2 |
| <ul style="list-style-type: none"> Shows some understanding of production or consumption in the global fast fashion industry illustrated in the diagram | 1 |

Sample answer:

Fast fashion is produced in Asia and consumed in North America, Europe, Australia and increasingly in South America. Fast fashion from Asia is not consumed directly in Africa but fashion waste is imported into Africa.

Question 20 (b)

| Criteria | Marks |
|--|-------|
| <ul style="list-style-type: none"> Demonstrates a thorough understanding of how and why the fast fashion industry could impact ecosystems Relates impacts to aquatic OR land-based ecosystems in detail | 5 |
| <ul style="list-style-type: none"> Demonstrates a sound understanding of how and why the fast fashion industry could impact ecosystems Relates impacts to aquatic OR land-based ecosystems | 4 |
| <ul style="list-style-type: none"> Demonstrates a basic understanding of how AND/OR why the fast fashion industry could impact ecosystems OR <ul style="list-style-type: none"> Explains ONE potential impact of the fast fashion industry | 3 |
| <ul style="list-style-type: none"> Demonstrates a limited understanding of how OR why the fast fashion industry could impact ecosystems | 2 |
| <ul style="list-style-type: none"> Provides some relevant information | 1 |

Sample answer:

Impact on land-based ecosystems

The high volume of fast fashion waste increases demand for landfill sites and creates pressure to clear land to produce more fibre to satisfy increasing demand for fashion. These activities contribute to the loss of terrestrial ecosystems such as forests, grasslands and freshwater wetlands, reducing their spatial extent and increasing their vulnerability to further change. Ecosystems fragmented by land clearing, such as eucalypt forests, are more vulnerable to the edge effects of settlement and agriculture such as exotic species and feral animals. Waste in landfill releases methane, a greenhouse gas, which, along with the CO₂ produced by production and transportation, affects ecosystem functioning by altering the physical conditions in which an ecosystem can survive.

Question 20 (c)

| Criteria | Marks |
|--|-------|
| <ul style="list-style-type: none"> • Makes clear reference to a global economic activity • Clearly draws out and relates implications of ONE strategy used to achieve social or environmental sustainability | 6 |
| <ul style="list-style-type: none"> • Makes reference to a global economic activity • Relates implications of ONE strategy used to achieve social or environmental sustainability | 5 |
| <ul style="list-style-type: none"> • Identifies a global economic activity • Attempts to relate implications of ONE strategy used to achieve social or environmental sustainability | 4 |
| <ul style="list-style-type: none"> • May identify a global economic activity • Describes ONE strategy used to achieve social or environmental sustainability | 2–3 |
| <ul style="list-style-type: none"> • Provides some relevant information | 1 |

Sample answer:

Cruise ship tourism threatens the environmental sustainability of marine ecosystems through its impact on biodiversity. In Glacier Bay National Park in Alaska, USA tourists come to see wildlife whose survival depends on a healthy marine environment. Pollution from wastewater and ballast discharge, fuel leakage and biocides from ships, as well as the noise, lights, and physical disturbance of wildlife and habitats by tourists needed effective management. The US government agency managing cruise shipping introduced limited entry permits to reduce environmental impacts and increase compliance with environmental regulations such as waste disposal. Every ten years, cruise operators must submit a proposal to visit. The strategy has been effective because new contracts are awarded to operators with a record of following environmental regulations. As a result of intense competition for limited permits, cruise tourism in Alaska has become more environmentally sustainable.

Section III

Question 21 (a)

| Criteria | Marks |
|--|-------|
| <ul style="list-style-type: none"> Identifies features of Denham using the sources and information provided Describes geographical influences that have shaped the size and character of Denham | 4 |
| <ul style="list-style-type: none"> Identifies features of Denham using the sources and information provided Briefly describes geographical influences that have shaped the size AND/OR character of Denham | 3 |
| <ul style="list-style-type: none"> Identifies a feature of Denham from at least one of the sources | 2 |
| <ul style="list-style-type: none"> Provides some relevant information | 1 |

Sample answer:

Denham (AR 7513 Source *D*) is a small, remote, coastal settlement and service centre for locals and tourists. The arid, sparsely vegetated landscape surrounding Denham seen in the panorama photograph (Source *F*) suggests a low population density. On the Peron Peninsula there appears to be mining activity as evident in the Shark Bay Mine and Denham South Mine in AR 7610. The town services a small local population and therefore offers limited essential facilities and services such as Police, Fire, School and Nursing Post (map of Denham). Denham's location near Shark Bay Marine Park and Hamelin Pool Marine Nature Reserve attracts thousands of tourists to the region who need temporary accommodation. Access to tours around Wulyibidi and to the marine parks is provided by road and via the jetties and watercraft shown in Source *E*.

Question 21 (b)

| Criteria | Marks |
|--|-------|
| <ul style="list-style-type: none"> Identifies and locates a rural place States in detail how AND/OR why the rural place and Denham are linked to other places Correctly refers to links at different scales | 6 |
| <ul style="list-style-type: none"> Identifies and locates a rural place States how AND/OR why the rural place and Denham are linked to other places Refers to links at different scales | 4–5 |
| <ul style="list-style-type: none"> Identifies a rural place AND/OR refers to Denham Describes links to other places Makes some reference to scale | 2–3 |
| <ul style="list-style-type: none"> Identifies a rural place and a link to another place | 1 |

Answers could include:

- connections at a local, regional, national or global scale
- economic, political, social, cultural or environmental connections
- specific details about the rural place studied
- assumptions about similar connections for the town of Denham appropriate to the size, function and location of Denham.

Connections could be:

- to a regional centre – for employment, facilities and services eg transport links such as air and rail and educational facilities
- to a large city – similar to above eg Sydney or Perth
- to other national and international locations via tourism
- family connections of local residents to other places/cultural connections
- farming connections – if the place services rural industries.

Question 21 (c)

| Criteria | Marks |
|--|-------|
| <ul style="list-style-type: none"> • Identifies and makes close reference to an urban place within a larger settlement • Demonstrates a comprehensive understanding of changes affecting the urban place • Clearly draws out similarities AND/OR differences between changes affecting the urban place and potential changes that could affect Denham • Makes clear reference to sources in the Stimulus Booklet | 9–10 |
| <ul style="list-style-type: none"> • Identifies and refers to an urban place within a larger settlement • Demonstrates a thorough understanding of changes affecting the urban place • Refers to similarities AND/OR differences between changes occurring in the urban place and potential changes that could affect Denham • Refers to sources in the Stimulus Booklet | 7–8 |
| <ul style="list-style-type: none"> • Identifies an urban place within a larger settlement • Demonstrates a sound understanding of changes affecting the urban place • Refers to some similarities AND/OR differences between changes occurring in the urban place AND/OR potential changes that could affect Denham • Makes some reference to sources in the Stimulus Booklet | 5–6 |
| <ul style="list-style-type: none"> • Names an urban place • Demonstrates a basic understanding of changes affecting the urban place • Outlines some change in the urban place AND/OR potential change in Denham • May refer to sources in the Stimulus Booklet | 3–4 |
| <ul style="list-style-type: none"> • Makes some reference to change | 1–2 |

Answers could include:

For urban place studied, changes that are:

- economic
- social
- cultural
- environmental changes in the place studied.

Examples:

- migration into or out of the place
- employment opportunities
- impacts of global pandemic

- affordability of housing
- public transport and other services
- crime
- liveability
- climate change
- natural hazards.

For Denham

Potential changes could be:

- international tourism decline
- climate change
- sea level rising
- improved roads
- employment opportunities
- mining closures
- reference to evidence of activities that might change.

Section IV

Question 22

| Criteria | Marks |
|---|-------|
| <ul style="list-style-type: none"> • Demonstrates comprehensive knowledge and understanding of the differences in the management of ONE type of ecosystem at TWO different locations • Provides highly-developed reasons for the differences in the management of ONE type of ecosystem at TWO different locations • Integrates relevant examples, geographical information and sources in the Stimulus Booklet where appropriate to support the response • Presents a sustained, logical and cohesive response using appropriate geographical information, ideas, terms and concepts | 17–20 |
| <ul style="list-style-type: none"> • Demonstrates well-developed knowledge and understanding of the differences in the management of ONE type of ecosystem at TWO different locations • Provides well-developed reasons for the differences in the management of ONE type of ecosystem at TWO different locations • Refers to relevant examples, geographical information and sources in the Stimulus Booklet where appropriate to support the response • Presents a logical response using appropriate geographical information and concepts | 13–16 |
| <ul style="list-style-type: none"> • Demonstrates sound knowledge and understanding of the differences in the management of ONE type of ecosystem at TWO different locations • Provides some reasons for the differences in the management of ONE type of ecosystem at TWO different locations • Refers to examples, geographical information and sources in the Stimulus Booklet where appropriate • Presents a structured response using appropriate geographical information | 9–12 |
| <ul style="list-style-type: none"> • Demonstrates some knowledge and understanding of the differences in the management of ecosystem/s • May refer to examples, geographical information AND/OR sources in the Stimulus Booklet • Uses some geographical information | 5–8 |
| <ul style="list-style-type: none"> • Demonstrates a basic understanding of ecosystem management | 1–4 |

Answers could include:

Reference to one type of ecosystem at two different locations that can be in Australia or overseas, for example Great Barrier Reef and New Caledonia Coral Reef; Florida Everglades wetland ecosystem and Okavango delta wetland ecosystem.

Details of management strategies at each location such as:

- national park designation
- landuse zoning
- legislation
- reforestation
- fishing quotas
- landuse agreements with Indigenous Peoples
- closed seasons

- wildlife breeding programs.

Reasons for differences in ecosystem management could include:

- economic factors
- politics
- sociocultural factors (such as level of development, cultures, Indigenous Peoples' practices, ideology, nature of the economy, land ownership, business interests and government policy).

Responses may refer to differences in complexity, enforcement, monitoring, compliance, the success of management strategies at each location due to the influences identified.

HSC Geography Sample Mapping Grid

Section I

| Question | Marks | Content | Syllabus outcomes | Targeted performance bands |
|----------|-------|---|-------------------|----------------------------|
| 1 | 1 | Geographical tools (map) | 12-5 | 2–3 |
| 2 | 1 | Rural and urban places – Rural and urban settlement – Geographical tools (photograph) | 12-1 | 2–3 |
| 3 | 1 | Global sustainability – Sustainability in the contemporary world – Geographical inquiry skills (develop a plan) | 12-3 | 3–4 |
| 4 | 1 | Geographical tools (climate graph, temperature) | 12-8 | 2–3 |
| 5 | 1 | Geographical tools (climate graph, rainfall) | 12-8 | 3–4 |
| 6 | 1 | Ecosystems and global biodiversity – Ecosystems and biodiversity | 12-3 | 3–4 |
| 7 | 1 | Ecosystems and global biodiversity – Ecosystems and biodiversity | 12-4 | 3–4 |
| 8 | 1 | Geographical tools (population profile) | 12-8 | 3–4 |
| 9 | 1 | Geographical tools (topographic map, direction) | 12-7 | 4–5 |
| 10 | 1 | Geographical tools (topographic map, distance, time and speed) | 12-8 | 4–5 |
| 11 | 1 | Geographical tools (tables and geographical data) | 12-8 | 4–5 |
| 12 | 1 | Rural and urban places – Rural and urban settlement – Geographical tools (spatial patterns) | 12-5 | 4–5 |
| 13 | 1 | Rural and urban places – Rural and urban settlement – Geographical tools (map) | 12-1 | 5–6 |
| 14 | 1 | Global sustainability – Sustainability in the contemporary world – Geographical tools (radar graph) | 12-1 | 4–5 |
| 15 | 1 | Global sustainability – Sustainability in the contemporary world – Geographical tools (radar graph) | 12-5 | 5–6 |

Section II

| Question | Marks | Content | Syllabus outcomes | Targeted performance bands |
|----------|-------|---|-------------------|----------------------------|
| 16 (a) | 2 | Geographical tools (map, graph) | 12-7 | 2–4 |
| 16 (b) | 3 | Ecosystems and global biodiversity – Ecosystems and biodiversity – Geographical inquiry skills (geographical information) | 12-1 | 3–5 |
| 16 (c) | 6 | Ecosystems and global biodiversity – Ecosystems and biodiversity – Geographical inquiry skills (geographical information) | 12-3 | 2–6 |
| 17 (a) | 4 | Ecosystems and global biodiversity – Ecosystems and biodiversity | 12-3, 12-4 | 2–5 |
| 17 (b) | 4 | Global sustainability – Sustainability in the contemporary world | 12-3, 12-4 | 3–6 |
| 18 | 6 | Rural and urban places – Rural and urban settlement | 12-4 | 2–6 |

| Question | Marks | Content | Syllabus outcomes | Targeted performance bands |
|----------|-------|---|-------------------|----------------------------|
| 19 (a) | 3 | Rural and urban places – Rural and urban settlement – Geographical inquiry skills (spatial technology tools) | 12-7 | 2–4 |
| 19 (b) | 4 | Rural and urban places – Rural and urban settlement – Geographical inquiry skills (fieldwork) | 12-6 | 2–5 |
| 20 (a) | 2 | Global sustainability – Investigation of a global economic activity – Geographical inquiry skills (geographical information) | 12-5 | 2–4 |
| 20 (b) | 5 | Global sustainability – Investigation of a global economic activity Ecosystems and global biodiversity – Ecosystems and biodiversity | 12-1 | 2–5 |
| 20 (c) | 6 | Global sustainability – Evaluating sustainability | 12-4 | 2–6 |

Section III

| Question | Marks | Content | Syllabus outcomes | Targeted performance bands |
|----------|-------|---|-------------------|----------------------------|
| 21 (a) | 4 | Rural and urban places – Rural and urban settlement – Geographical tools (topographic map, photograph) | 12-1, 12-2, 12-5 | 2–4 |
| 21 (b) | 6 | Rural and urban places – Investigation of a rural and an urban place – Geographical tools (topographic map, photograph) | 12-1, 12-2, 12-5 | 2–6 |
| 21 (c) | 10 | Rural and urban places – Investigation of a rural and an urban place – Geographical inquiry skills (geographical understanding) | 12-1, 12-2, 12-5 | 2–6 |

Section IV

| Question | Marks | Content | Syllabus outcomes | Targeted performance bands |
|----------|-------|---|-------------------|----------------------------|
| 22 | 20 | Ecosystems and global biodiversity – Investigation of ecosystems | 12-3 | 2–6 |