The external assessment requirements of this subject are listed on page 18.

Geography
2018 Sample paper

Question booklet

- **Section 1** (Questions 1 and 2) 33 marks
- **Section 2** (Questions 3 and 4) 27 marks
- Answer all questions
- Write your answers in this question booklet
- You may write on page 17 if you need more space

Examination information

Materials
- Question booklet
- Sheet of additional material
- SACE registration number label

Reading time
- 10 minutes

Writing time
- 2 hours
- Use black or blue pen
- Approved calculators may be used

Total marks 60
SECTION 1 (Questions 1 and 2)
(33 marks)

1. Refer to the topographic map PITLOCHRY, scale 1: 25000, on the separate sheet.

(a) Study the main roads through Pitlochry, from Ballinluig (grid reference 975 529) to The Soldier’s Leap (grid reference 913 627).

(i) Using evidence from the map, analyse the problems that were encountered when building the roads and describe how these problems were overcome.

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(3 marks)

(ii) Using evidence from the map, suggest one reason why the main road splits in two at Pitlochry and suggest two outcomes of this split.

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(3 marks)
(b) A section of the Rob Roy Way, one of Scotland’s Great Trails (a long-distance path), runs between Pitlochry (grid reference 941 579) and Strathtay (grid reference 913 534).

(i) How long is this section of the Rob Roy Way?

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(1 mark)

(ii) A family with two young children have decided to walk this section of the Rob Roy Way. Describe the advantages and disadvantages of this route for the family. Use evidence from the map to support your answer.

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(5 marks)
(c) Refer to the following information and to the map on the separate sheet:

**PITLOCHRY**

The landscape, heritage, and cultural attractions of Pitlochry and the surrounding area make it a popular destination for tourists and day trippers. An adventure tourism company plans to build an outdoor activity centre to cater for visitors seeking land-based and water-based activities. The site for the centre should have easy access to water and be within easy reach, by minibus, of significant features of the landscape. In addition, the site for the centre must have space for the storage of equipment, including kayaks; change rooms; a toilet block; a restaurant; and parking facilities for cars and tour buses.

Choose an appropriate site for the outdoor activity centre. Your choice of site should optimise the factors that you consider to be most important for the centre. The size of your site should reflect the criteria described above.

(i) State the six-figure grid reference for your chosen site.  

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(1 mark)
(ii) Discuss six aspects of the physical and human environment that influenced your choice of site. Provide detailed evidence from the map that is on the separate sheet to support your answer.

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(6 marks)

(iii) Suggest two additional pieces of data that you could collect to help you choose the best site for the outdoor activity centre.

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(2 marks)
2. (a) Refer to the following information, which shows data collected and analysed by a group of geography students:

### Capacity and volume of 10 reservoirs

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Capacity (ML)</th>
<th>1980</th>
<th></th>
<th>Volume (ML)</th>
<th>Percentage of capacity</th>
<th>Volume (ML)</th>
<th>Percentage of capacity</th>
<th>Volume (ML)</th>
<th>Percentage of capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>27000</td>
<td>24000</td>
<td>89%</td>
<td>23000</td>
<td>85%</td>
<td>21000</td>
<td>78%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>44900</td>
<td>29000</td>
<td>65%</td>
<td>27500</td>
<td>61%</td>
<td>22500</td>
<td>50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>11800</td>
<td>11200</td>
<td>95%</td>
<td>11000</td>
<td>93%</td>
<td>10100</td>
<td>86%</td>
<td></td>
<td></td>
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<tr>
<td>4</td>
<td>2600</td>
<td>2400</td>
<td>92%</td>
<td>2300</td>
<td>88%</td>
<td>2000</td>
<td>77%</td>
<td></td>
<td></td>
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<tr>
<td>5</td>
<td>19400</td>
<td>14500</td>
<td>75%</td>
<td>11700</td>
<td>60%</td>
<td>2500</td>
<td>13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>16500</td>
<td>15100</td>
<td>92%</td>
<td>14900</td>
<td>90%</td>
<td>10600</td>
<td>64%</td>
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<td>7</td>
<td>21100</td>
<td>16600</td>
<td>79%</td>
<td>13000</td>
<td>62%</td>
<td>9800</td>
<td>46%</td>
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<tr>
<td>8</td>
<td>44500</td>
<td>33700</td>
<td>76%</td>
<td>29500</td>
<td>66%</td>
<td>15000</td>
<td>34%</td>
<td></td>
<td></td>
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<tr>
<td>9</td>
<td>4900</td>
<td>3300</td>
<td>67%</td>
<td>3100</td>
<td>63%</td>
<td>1300</td>
<td>26%</td>
<td></td>
<td></td>
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<tr>
<td>10</td>
<td>4400</td>
<td>4200</td>
<td>95%</td>
<td>4200</td>
<td>95%</td>
<td>3900</td>
<td>87%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(i) How have the reservoir volumes changed over time?

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(1 mark)

(ii) Suggest two ways that climate change may have influenced reservoir volumes over time.

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(2 marks)
(iii) Suggest two ways that population change may have influenced reservoir volumes over time.

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(2 marks)

(iv) Describe two distinctly different ways of presenting the data shown in the table.

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(2 marks)
(b) Consider any fieldwork you have undertaken either individually or as a class, and the techniques you used to collect data.

State the focus of your fieldwork and discuss:
• the success of the techniques you used to collect data
• how the collection of data could have been improved.

Focus: ____________________________________________

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Discussion: ________________________________________

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(5 marks)
SECTION 2 (Questions 3 and 4)  
(27 marks)

3. (a) Refer to the following map:

Ecological footprint (EF) per capita (2012)

[Map showing different regions with key: EF <1, EF 1–8, EF >8]

Source: Based on data from Global Footprint Network, National Footprint Accounts, 2016 edn

Describe and explain the global pattern of ecological footprints shown on the map.

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(4 marks)
(b) Refer to an ecosystem that you have studied.

(i) Outline the characteristics of this ecosystem.

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(2 marks)

(ii) Describe and explain the impact of people on this ecosystem.

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(4 marks)
(iii) Discuss the management strategies used to improve the sustainability of this ecosystem.

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(4 marks)
4. Refer to the following relief map and population density map for Brazil, which is a developing country in South America:

Relief map of Brazil, South America

Source: © AridOcean | Shutterstock.com
(a) Outline the factors that influence where people live in Brazil.

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(3 marks)
Refer to the following line graphs when answering Questions 4(b) and 4(c):

**Total population, Brazil (1960–2015)**

![Graph showing the total population of Brazil from 1960 to 2015.](image)

*Source: Based on population data from The World Bank, World Development Indicators*

**Urban and rural populations in Brazil (1940–2010)**

![Graph showing urban and rural populations of Brazil from 1940 to 2010.](image)

*Source: Based on data from IBGE (Brazilian Institute of Geography and Statistics)*
(b) Suggest factors that may be influencing the population change in Brazil.
(c) Suggest why many people move from rural Brazil to the cities of Brazil.
You may write on this page if you need more space to finish your answers. Make sure that you label each answer carefully (e.g. 1(c)(ii) continued).
The purpose of this sample paper is to show the structure of the Geography examination and the style of questions that may be used. The following extract is from the 2018 subject outline for Geography:

**EXTERNAL ASSESSMENT**

**Assessment Type 3: Examination (30%)**

Students undertake one 2-hour written examination consisting of two sections.

Section 1 focuses on geographical skills and Section 2 focuses on application of skills developed through the study of Topics 1 and 3.

**Section 1 (approximately 50%)**

In Section 1, students focus on solving problems and making decisions by applying a range of geographical skills to interpret written and visual material, including maps, provided in the examination. They draw on skills, understanding, and knowledge gained from individual and class fieldwork activities and apply this in unfamiliar contexts.

The geographical skills assessed in Section 1 are selected from the following:

- select or identify data appropriate to a geographical context or issue
- evaluate the usefulness and accuracy of fieldwork techniques
- evaluate the limitations of data collected
- identify appropriate visual representations of data
- interpret secondary sources of data and information
- use maps and spatial technologies (latitudes, longitudes, grid references, legends or keys, directions, and contours)
- interpret images, including aerial, oblique, and ground photographs, and satellite images
- understand and apply scale (enlargement, reduction, area, and distance)
- analyse and interpret statistics, fieldwork data, maps, profiles, cross-sections, and transects
- identify and analyse patterns and trends, infer relationships, and make predictions
- make recommendations, form conclusions, and solve problems
- use subject-specific terminology.

**Section 2 (approximately 50%)**

In Section 2, students answer open-ended questions about:

- Topic 1: Ecosystems and People

Students use examples of contemporary case studies from class activities and interpret and analyse sources provided in the examination paper. They apply their understanding of geographical information and of the complex interactions between physical and human environments.

All specific features of the assessment design criteria for this subject may be assessed in the external examination.

*Source: Geography 2018 Subject Outline Stage 2, p 15, on the SACE website, www.sace.sa.edu.au*
ACKNOWLEDGMENT

Question 4, page 13, Map: Population density map of Brazil, 2010


Question 4, page 14, Graph: Total population, Brazil (1960–2015)


Question 4, page 14, Graph: Urban and rural populations in Brazil (1940–2010)

Based on data from Ignazzi, CA 2015, ‘The Brazilian Urban System: the trajectories of Brazilian cities between general dynamics and specific peculiarities’, Cybergeo: European Journal of Geography [Online], Systems, Modelling, Geostatistics, article 754, online since 14 December 2015, cybergeo.revues.org/27349; DOI 10.4000/cybergeo.27349; figure 3, sourced from IBGE (Brazilian Institute of Geography and Statistics).

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