GEOGRAPHY

Written examination

Monday 1 November 2010

Reading time: 3.00 pm to 3.15 pm (15 minutes)
Writing time: 3.15 pm to 5.15 pm (2 hours)

QUESTION AND ANSWER BOOK

Structure of book

<table>
<thead>
<tr>
<th>Number of questions</th>
<th>Number of questions to be answered</th>
<th>Number of marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>4</td>
<td>60</td>
</tr>
</tbody>
</table>

- Students are permitted to bring into the examination room: pens, pencils, highlighters, erasers, sharpeners, rulers, coloured water-based pens and markers.
- Students are NOT permitted to bring into the examination room: blank sheets of paper and/or white out liquid/tape.
- No calculator is allowed in this examination.

Materials supplied
- Question and answer book of 14 pages.
- A data book.
- Additional space is available at the end of the book if you need extra paper to complete an answer.

Instructions
- Write your student number in the space provided above on this page.
- All written responses must be in English.

At the end of the examination
- You may keep the data book.

Students are NOT permitted to bring mobile phones and/or any other unauthorised electronic devices into the examination room.

© VICTORIAN CURRICULUM AND ASSESSMENT AUTHORITY 2010
Instructions
Answer all questions in the spaces provided. Refer to the data book as indicated.

Use Figure 1 on pages 2, 3, 4 and 5 of the data book when responding to Question 1.

Question 1

a. Ten locations are marked as A, B, C, D, E, F, G, H, I and J on the map of the Murray-Darling Basin. For each of the four areas listed below, identify its location from the map.

Location

i. The Mouth of the Murray-Darling River system

ii. A region of major hydroelectricity generation

iii. A Ramsar wetland

iv. Intensive irrigation for citrus crops

1 + 1 + 1 + 1 = 4 marks

For Question 1b, refer to the data book pages 4 and 5.

b. i. In which year was the largest area under irrigation for cropping?

ii. In which year was the smallest area under irrigation for cropping?

iii. Explain what is meant by the term ‘water allocation’.

Question 1 – continued
iv. To what extent does the percentage of water allocation appear to have affected the area of irrigation cropping over the years shown?

v. To what extent does the amount of rain falling in the region of the farm (refer to Figure 1d in the data book) appear to have affected the area of irrigation cropping over the years shown?

$1 + 1 + 1 + 3 + 3 = 9$ marks
c. i. There are many conflicts between water users within the Murray-Darling Basin. Outline one conflict over the use of water within the Murray-Darling Basin.

ii. Discuss a strategy that has been developed or proposed to manage the conflict outlined in **part i.**

3 + 4 = 7 marks

Total 20 marks
Question 2
Identify a local resource for which you have collected data in the field.

In the space below, sketch a map to show the main features of your local resource studied in the field.
a. Describe the location of your local resource within its regional context.

______________________________________________________________________________________________________________________________________________________

______________________________________________________________________________________________________________________________________________________

______________________________________________________________________________________________________________________________________________________

______________________________________________________________________________________________________________________________________________________

______________________________________________________________________________________________________________________________________________________

2 marks

b. Annotate your sketch map to show an example of movement within your local fieldwork resource. You may use an arrow or arrows to indicate movement.

2 marks

c. Discuss how the movement shown in part b. has resulted in either a positive or negative impact on either the people or their environment within your local fieldwork resource.

______________________________________________________________________________________________________________________________________________________

______________________________________________________________________________________________________________________________________________________

______________________________________________________________________________________________________________________________________________________

______________________________________________________________________________________________________________________________________________________

______________________________________________________________________________________________________________________________________________________

2 marks

d. Annotate your sketch map to show the location of an area that could be affected or has been affected by a policy to manage the positive or negative impact discussed in part c.

1 mark

e. Evaluate the future practicality of this management policy using data you have collected in the field.

______________________________________________________________________________________________________________________________________________________

______________________________________________________________________________________________________________________________________________________

______________________________________________________________________________________________________________________________________________________

______________________________________________________________________________________________________________________________________________________

______________________________________________________________________________________________________________________________________________________

3 marks

Total 10 marks
Question 3

Use Figure 2 on pages 6 and 7 of the data book when responding to Question 3a.

a. Discuss the following statement.

‘The global distribution of population is uneven and is likely to remain so in the future.’

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

6 marks
Use Figure 2 on pages 8 and 9 of the data book when responding to Question 3b.

b. i. Identify and quantify one change that has occurred in the age-sex structure of the world’s less-developed countries between 1990 and 2010.

ii. Identify and quantify one change that has occurred in the age-sex structure of the world’s more-developed countries between 1990 and 2010.

1 + 1 = 2 marks
c. Name a country you have studied this year.

i. Outline a major population change that has occurred in relation to this country.

ii. Describe one strategy undertaken in response to either the positive or negative impacts of this population change in this country.

iii. Evaluate the effectiveness of the strategy described in the answer to part ii.

2 + 2 + 3 = 7 marks
Total 15 marks
Question 4

a. i. Use the outline map provided below to map the distribution of a global phenomenon you have studied. Do not use the phenomenon of human population.

ii. On your map, mark and name the specific locations of two places related to your mapped global phenomenon.

3 + 1 = 4 marks
b. Discuss the positive or negative impacts of changes on either people or environments of this global phenomenon at the two locations marked on your map.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

4 marks

c. Evaluate the effectiveness of one strategy to deal with either the positive or negative impacts on people or environments of the global phenomenon at both locations marked on your map.

Strategy ________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Evaluation at location one ________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Evaluation at location two ________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

7 marks

Total 15 marks

END OF QUESTION AND ANSWER BOOK
Extra space for responses

Clearly number all responses in this space.
GEOGRAPHY
Written examination

Monday 1 November 2010
Reading time: 3.00 pm to 3.15 pm (15 minutes)
Writing time: 3.15 pm to 5.15 pm (2 hours)

DATA BOOK

Directions to students

• A question and answer book is provided with this data book.
• Refer to the data in this book for each question as indicated in the question and answer book.
• The data contained in this book is drawn from current real world case studies.

Students are NOT permitted to bring mobile phones and/or any other unauthorised electronic devices into the examination room.
Figure 1a: Murray-Darling Basin locations
Figure 1c: Background information

The 855 hectare farm is located near Leeton and Yanco in the Murrumbidgee Irrigation Area. Its land uses are a mixture of irrigation crops – mostly rice, soybeans and lucerne – and non-irrigated or dry crops, such as oats and barley as well as hay for the farm’s sheep and cattle. The owners believe a minimum water allocation of 40 per cent is needed for their farm to operate profitably.

Figure 1d: Annual rainfall at Yanco near Leeton, 2004–2009

<table>
<thead>
<tr>
<th>Year</th>
<th>Rainfall in millimetres</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>268.0</td>
</tr>
<tr>
<td>2005</td>
<td>445.0</td>
</tr>
<tr>
<td>2006</td>
<td>189.8</td>
</tr>
<tr>
<td>2007</td>
<td>450.8</td>
</tr>
<tr>
<td>2008</td>
<td>343.2</td>
</tr>
<tr>
<td>2009</td>
<td>289.0</td>
</tr>
</tbody>
</table>

Highest annual rainfall since 1957: 450.8 mm
Lowest annual rainfall since 1957: 189.8 mm
Figure 1: Murray-Darling Basin

Figure 1e: Land use, summer, 2004–2005

- 43% water allocation

Figure 1f: Land use, summer, 2005–2006

- 57% water allocation

Figure 1g: Land use, summer, 2006–2007

- 18% water allocation

Key to Figures 1e–1j

<table>
<thead>
<tr>
<th>Irrigation crops</th>
<th>Irrigation crops cut for hay</th>
</tr>
</thead>
<tbody>
<tr>
<td>rice</td>
<td>soybeans</td>
</tr>
<tr>
<td>Non-irrigation crops</td>
<td></td>
</tr>
<tr>
<td>barley, oats and/or grass</td>
<td>lucerne</td>
</tr>
</tbody>
</table>
• 21% water allocation

Figure 1h: Land use, summer, 2007–2008

• 26% water allocation

Figure 1i: Land use, summer, 2008–2009

• 28% water allocation

Figure 1j: Land use, summer, 2009–2010
Figure 2a: World population distribution, 2000

Key to map

Number of persons per km²

- Purple: 100 and over
- Orange: 50–100
- Pink: 10–50
- Light yellow: 1–10
- White: less than 1

- Blue: river
- Light blue: lake
- Red: international boundary
Figure 2b: Percentage of world population by region
Less-developed countries (or LDCs) have low gross national income per person (usually less than US$2000) per year, low rates of energy consumption per capita and a high proportion of the workforce in agricultural activities. LDCs include countries such as Venezuela, Papua New Guinea, Indonesia, Pakistan, Ethiopia and Nigeria.
More-developed countries (or MDCs) have high gross national income per person, high rates of literacy, health and energy consumption and a high proportion of the workforce in urban-based service sectors. MDCs include countries such as the United States, Japan, Australia, Singapore, Germany, France and the United Kingdom.