HEALTH AND HUMAN DEVELOPMENT

Written examination

Wednesday 7 November 2012
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>Section</th>
<th>Number of questions</th>
<th>Number of questions to be answered</th>
<th>Number of marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>8</td>
<td>8</td>
<td>30</td>
</tr>
<tr>
<td>B</td>
<td>7</td>
<td>7</td>
<td>70</td>
</tr>
<tr>
<td></td>
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<td>Total 100</td>
</tr>
</tbody>
</table>

- Students are permitted to bring into the examination room: pens, pencils, highlighters, erasers, sharpeners and rulers.
- 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
- 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.

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

Question 1
Describe the mental dimension of health.

Question 2
Explain the glycaemic index.
Question 3
The Australian Government is responsible for administering the Pharmaceutical Benefits Scheme (PBS).

a. What is the PBS?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2 marks

b. Explain how the PBS may improve the health status of Australians.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
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2 marks
Question 4
The 2007 Australian National Children’s Nutrition and Physical Activity Survey (Children’s Survey) was commissioned by the Department of Health and Ageing, the Department of Agriculture, Fisheries and Forestry, and the Australian Food and Grocery Council.
Among others, the Children’s Survey showed the following results.

### Sugar
- In the children surveyed, sugar contributed to between 23–24 per cent of total energy intake. The Dietary Guidelines recommend a diet moderate in sugar (energy from sugar should not contribute more than 20 per cent of overall energy intake).
- The proportion of all children who met the recommendations for a diet moderate in sugar increased with age (29 per cent of those aged 4–8 years compared with 39 per cent of 14–16 year olds).

### Micronutrients
- Results indicate that some micronutrient intakes such as calcium, sodium and magnesium are likely to be problematic, particularly for the 14–16 year olds who were the least likely to meet the recommended intake.

Source: 2007 Australian National Children’s Nutrition and Physical Activity Survey (Children’s Survey) used by permission of the Australian Government

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a. Select one of the results of the survey outlined above and describe briefly the possible short- or long-term consequences for health.

b. In terms of promoting healthy eating, provide two reasons why the government carries out national nutrition surveys.

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2 marks

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4 marks
Question 5

In May 2010, the member states of the World Health Organization (WHO) collectively agreed to a ‘global strategy to reduce the harmful use of alcohol’. The strategy recommends ten areas for national action that countries should focus on.

• leadership, awareness and commitment
• health services’ response
• marketing of alcoholic beverages
• drink-driving policies and countermeasures
• reducing the negative consequences of drinking and alcohol intoxication
• availability of alcohol
• reducing the public health impact of illicit alcohol and informally produced alcohol
• community action
• pricing policies
• monitoring and surveillance

Source: adapted from World Health Organization (2010); www.who.int/en/

List one of the core functions of the WHO and identify two areas above that demonstrate this core function.

core function __________________________________________________________

area 1 ________________________________________________________________

area 2 ________________________________________________________________

3 marks
Question 6
Despite strong economic growth over recent years, poverty among Indonesia’s 237 million people remains widespread.
Describe one program that the Australian Agency for International Development (AusAID) could implement in Indonesia to reduce poverty.

3 marks
Question 7

**Protecting livelihoods in Zimbabwe**

Sarah Ncube, from the Chidobe Ward in Zimbabwe, used to struggle to produce enough food for her family and to pay for her children’s school fees.

In 2008, she came across the Protracted Relief Program that helped her grow a wider variety of crops. Through the program, she was able to buy seeds and other agricultural supplies such as fertiliser.

After just a year, her family harvested enough grains – including sorghum, millet and maize – to fill their stomachs every day. She’s now selling the crops they don’t eat for cash, providing $30–$50 in income a year.

Through the program, Sarah participated in a health and hygiene program to help keep her new collection of pots and plates spotlessly clean. She’s joined a savings and loans group to help her manage her finances and she’s also helping to manage the local borehole and water pump so the wider community can benefit from access to a reliable water source in the drought-ridden area.


**a.** Identify one Millennium Development Goal that the Protracted Relief Program is addressing.

1 mark

**b.** Use two examples from the extract above to demonstrate how the program in Zimbabwe is addressing the goal identified in **part a**.

1. __________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

2. __________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

2 marks
Question 8
In 2011, the Australian Institute of Health and Welfare released a report called ‘The health of Australia’s males’. It reported that one in six Australian males did not use Medicare services in 2008–2009. This number is lower than that for females.

a. Identify the level of government responsible for administering Medicare.  

1 mark

b. Explain how Medicare is funded.  

2 marks

c. Explain one determinant of health that could account for the behaviour of males with regard to their use of Medicare services.  

2 marks

d. List two health services males might use that could be claimed through Medicare.  

1.  

2.  

2 marks
SECTION B

Question 1

‘In many ways cardiovascular disease (CVD) can be considered Australia’s most costly disease. It costs more lives than any other disease and has the greatest level of health expenditure. It also imposes a burden of disease, measured [by] disability and premature death, second only to cancer.’

Source: Australian Institute of Health and Welfare, Cardiovascular disease: *Australian facts 2011*, Cardiovascular disease series, cat. no. CVD 53, Canberra, p. x

a. Describe cardiovascular disease.


2 marks

b. Provide one example each of a direct, indirect and intangible cost to the individual and/or community associated with CVD.

direct cost


indirect cost


intangible cost


3 marks

c. Explain the role of nutrition in addressing cardiovascular health.


3 marks
Some population groups have much higher rates of illness and death from CVD than others, particularly Aboriginal and Torres Strait Islander peoples, those from the most socio-economically disadvantaged groups and those living in remote areas of Australia.

**d.** Select one of these population groups. Identify two determinants of cardiovascular health and explain how each of these determinants could contribute to higher rates of cardiovascular disease for this population group.

- **population group**: ____________________

- **determinant 1**: ____________________
  **explanation**: ____________________

- **determinant 2**: ____________________
  **explanation**: ____________________

**Question 2**

**Percentage of Australian adults who are overweight or obese by sex and age, 2007–2008**

![Graph showing percentage of overweight and obese adults by age and sex.](source)

Source: Australian Institute of Health and Welfare, Cardiovascular disease: *Australian facts 2011, Cardiovascular disease series*, cat. no. CVD 53, Canberra, p. 32
a. Outline one measurement that can be used to determine if an adult is obese.

_____________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________

1 mark

b. Using the data in the graph, draw one conclusion about overweight and obese males compared to females.

_____________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________

2 marks

c. Use two priority areas identified in the Ottawa Charter for Health Promotion to describe how the levels of obesity in Australia could be reduced.

priority area 1  __________________________________________________________________________________________

description  __________________________________________________________________________________________

_____________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________

priority area 2  __________________________________________________________________________________________

description  __________________________________________________________________________________________

_____________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________

4 marks
**Question 3**

Consider the following graph.

![Graph showing the percentage of global DALYs for various health issues across high-income, middle-income, and low-income countries.]


a. Explain what is meant by global marketing.

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

2 marks
b. i. From the graph, select one of the risk factors common to all three income levels for which global marketing plays a role.

ii. Discuss the influence that global marketing might have on the risk factor selected in part i.

1 + 3 = 4 marks
Question 4
The Heart Foundation is a non-government agency that provides dietary advice to help maintain healthy weight to lower the risk of contracting a range of diseases. The Heart Foundation advises the following.

• Eat a variety of foods.
• Include vegetables, wholegrains, fruit, nuts and seeds every day.
• Choose healthier fats and oils.
• Try to limit sugary, fatty and salty takeaway meals and snacks.
• Drink mainly water.

a. Compare this advice with that provided by the government in *The Australian Guide to Healthy Eating*.

b. Outline one health benefit of limiting the intake of sugary, fatty and salty takeaway meals and snacks.
c. The Heart Foundation’s advice is to ‘choose healthier fats and oils’. Identify two types of healthier fats and oils, and explain why they are considered to be healthier options.

1. 

2. 

4 marks

d. Draw one conclusion about the effectiveness of the advice provided by the Heart Foundation for maintaining a healthy weight.


2 marks
Question 5
The world is on track to achieve Millennium Development Goal 7 – ‘Ensure Environmental Sustainability’. The target for access to safe drinking water is within reach. More needs to be done to achieve the target for sanitation. In 2008, 2.6 billion people had no access to a hygienic toilet and 1.1 billion people were defecating outside.

Silus Simba is a leader of a program known as ‘Round Loo’. It is part of a WaterAid Australia program that helps communities build their own toilets in Papua New Guinea. People themselves pay a small contribution of $10 towards the cost of each toilet. WaterAid Australia provides the funds to employ a community leader, such as Silus, and some of the materials needed to build the toilets.

Source: www.wateraid.org/australia/

Part of my job is to encourage community members to form a group to work on the toilets . . . and then in return they make some money for food . . .

I travel in [a] loo car that has a megaphone on top playing the ‘poo’ song! The poo song has very good messages about hygiene and is in the local language so it is a very effective hygiene education tool . . .

It is effective at getting people to think about washing their hands.

a. Use the elements of affordability and appropriateness to discuss whether the Round Loo program would be sustainable.

4 marks
b. Use examples from the Round Loo program to explain the **interrelationships** between health, human development and sustainability.
Question 6
AusAID is responsible for managing the Australian Government’s overseas aid program.

a. List two objectives of AusAID.
   1. 
   2. 

b. Explain one reason why AusAID provides funding to non-government organisations (NGOs).

   
   
   
   2 marks

b. Explain one reason why AusAID provides funding to non-government organisations (NGOs).

   
   
   
   
   2 marks

c. i. Identify one NGO with which AusAID works.

   
   
   
   ii. Describe a program that the NGO, with AusAID, has implemented to promote global health and sustainable human development.

   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   
   1 + 4 = 5 marks
d. Complete the table below by identifying two different types of aid (other than funding NGOs) that AusAID provides. Describe each type of aid and give one example that represents each type.

<table>
<thead>
<tr>
<th>Type of aid</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6 marks
Question 7

Indicators of health status for a range of countries (2009)

<table>
<thead>
<tr>
<th>Country</th>
<th>GNI $US</th>
<th>Life expectancy</th>
<th>USMR /1000</th>
<th>Maternal mortality /100000</th>
<th>Injuries % of DALYs</th>
<th>Obesity % of population</th>
<th>HIV /1000</th>
<th>Tuberculosis /100000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>38510</td>
<td>82</td>
<td>5</td>
<td>8</td>
<td>15</td>
<td>25.2</td>
<td>24.9</td>
<td>1</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>–</td>
<td>68</td>
<td>199</td>
<td>1400</td>
<td>12</td>
<td>1.5</td>
<td>3.3</td>
<td>337</td>
</tr>
<tr>
<td>Bhutan</td>
<td>5290</td>
<td>63</td>
<td>79</td>
<td>200</td>
<td>14</td>
<td>4.7</td>
<td>6.6</td>
<td>2</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>35860</td>
<td>80</td>
<td>5</td>
<td>12</td>
<td>9</td>
<td>24.4</td>
<td>25.2</td>
<td>2</td>
</tr>
<tr>
<td>Sweden</td>
<td>38050</td>
<td>81</td>
<td>3</td>
<td>5</td>
<td>12</td>
<td>18.2</td>
<td>15.0</td>
<td>1</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>1170</td>
<td>52</td>
<td>166</td>
<td>560</td>
<td>7</td>
<td>1.7</td>
<td>3.0</td>
<td>12</td>
</tr>
<tr>
<td>Chad</td>
<td>1160</td>
<td>48</td>
<td>209</td>
<td>1200</td>
<td>5</td>
<td>2.4</td>
<td>3.8</td>
<td>34</td>
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<tr>
<td>Japan</td>
<td>33440</td>
<td>83</td>
<td>3</td>
<td>6</td>
<td>15</td>
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<tr>
<td>USA</td>
<td>45640</td>
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<td>24</td>
<td>19</td>
<td>30.2</td>
<td>33.2</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: World Health Organisation and Human Development Reports

a. Select one developing country from the table and use the data to justify whether it represents a developing country with high or low mortality strata.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

2 marks
b. Discuss two factors that could account for the differences in health status between Australia and the developing country selected in part a. on page 20.

6 marks
Extra space for responses
Clearly number all responses in this space.
A script book is available from the supervisor if you need extra paper to complete your answer. Please ensure you write your student number in the space provided on the front cover of the script book. At the end of the examination, place the script book inside the front cover of this question and answer book.