HEALTH AND HUMAN DEVELOPMENT

Written examination

Wednesday 5 November 2014
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>16</td>
<td>16</td>
<td>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.

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Instructions

Answer all questions in the spaces provided.

Question 1 (3 marks)

a. Define ‘disability adjusted life year (DALY)’.

b. Define ‘physical dimension of health’.

Question 2 (2 marks)

Consider the following information about key health indicators for three developed countries.

<table>
<thead>
<tr>
<th></th>
<th>Life expectancy at birth (both sexes)</th>
<th>Under-five mortality rate (per 1000 live births)</th>
<th>Adult mortality rate (per 1000 population)</th>
<th>Mortality rate (per 100 000 population)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Australia</td>
<td>82</td>
<td>5</td>
<td>80</td>
<td>46</td>
</tr>
<tr>
<td>Denmark</td>
<td>79</td>
<td>4</td>
<td>103</td>
<td>62</td>
</tr>
<tr>
<td>New Zealand</td>
<td>81</td>
<td>6</td>
<td>85</td>
<td>55</td>
</tr>
</tbody>
</table>


Using data from the table, describe the health status of Australia compared to Denmark and New Zealand.
Question 3 (5 marks)
Dental services are generally not covered by Medicare. However, in January 2014 the Child Dental Benefits Schedule was introduced. It provides financial support for basic dental services for children. To be eligible for these benefits:

• the child must be aged 2–17 years
• the child’s family must receive certain government benefits, such as Family Tax Benefit Part A, for at least part of the calendar year
• the child must be eligible for Medicare.

a. State one value that underpins the Australian health system and explain how it is evident in the Child Dental Benefits Schedule. 3 marks

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

b. List two other health services not covered by Medicare. 2 marks

1. ____________________________________________

2. ____________________________________________
Question 4 (5 marks)


a. Compare the life expectancy of males to females evident in the graph. 1 mark

b. Explain how one biological determinant and one social determinant could contribute to the variations in life expectancy between males and females. 4 marks

Biological determinant

Social determinant
Question 5 (14 marks)

a. Provide two reasons why the Australian Dietary Guidelines have been developed by the Australian Government.  

1. 

2. 


c. Dietary Guideline 3 states that an individual should ‘limit intake of foods containing saturated fat, added salt, added sugars and alcohol’.

Explain two ways in which this guideline may help reduce the incidence of diabetes mellitus.  

1. 

2. 

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Question 5 – continued

TURN OVER
d. Saturated fat and trans fat are two types of fat.
i. Explain the difference between saturated fat and trans fat. 2 marks

ii. List two food sources of saturated fat. 2 marks

1. 

2. 

e. The Australian Dietary Guidelines encourage individuals to consume breads and cereals. Identify one major nutrient in breads and cereals, and the function of this nutrient as a determinant of health. 2 marks

<table>
<thead>
<tr>
<th>Food source</th>
<th>Major nutrient</th>
<th>Function as a determinant of health</th>
</tr>
</thead>
<tbody>
<tr>
<td>breads and cereals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Question 6 (5 marks)

Prevalence of overweight and obesity among adults, by region

Source: Food and Agriculture Organization (FAO) of the United Nations, *The State of Food and Agriculture*, 2013, p. 17

a. Identify the developing region that has shown the greatest increase in the prevalence of overweight and obesity between 1980 and 2008.  
1 mark

b. i. Give one example of global marketing that could explain the increase in the percentage of overweight and obesity in developing regions.  
2 marks

ii. The increasing percentage of overweight and obesity is a worldwide concern.

In relation to this increase, explain one challenge faced by developing countries that is not faced by developed countries.  
2 marks
Question 7 (5 marks)
a. Give one example of how dietary advice is provided by Nutrition Australia. Describe how this example may help reduce the levels of obesity in Australia.  

Example ____________________________________________________________  

Description _________________________________________________________  

____________________________________________________________________  

____________________________________________________________________  

____________________________________________________________________  

b. Outline one direct cost and one indirect cost of obesity to the community.  

Direct cost ___________________________________________________________  

____________________________________________________________________  

Indirect cost __________________________________________________________  

____________________________________________________________________  

Question 8 (4 marks)
a. The World Health Organization (WHO) classifies countries into five mortality strata.  

On what basis are these classifications made?  

____________________________________________________________________  

____________________________________________________________________  

____________________________________________________________________  

b. Developing countries often share a number of social, environmental and economic characteristics.  

Identify any two examples of characteristics common to developing countries.  

1. ________________________________________________________________  

2. ________________________________________________________________
Question 9 (7 marks)
a. Provide two reasons why dementia is identified as a National Health Priority Area (NHPA).  

1. 

2. 

b. Outline one biological determinant and one behavioural determinant that may act as a risk factor for dementia.  

Biological determinant 

Behavioural determinant 

c. Describe one health promotion program that has been introduced to reduce the burden of disease associated with dementia.  


Question 10 (8 marks)

Local primary schools will receive support to participate in ‘walk to school’ opportunities … Monash Council has received $10,000 from VicHealth to implement the Walk to School program … The program is designed to raise awareness of the physical, environmental and social benefits of active transport, and to encourage school children to walk to and from school more often. Aside from supporting schools, Council will use the funding to develop a Monash walking map and online portal.

Source: Active Monash, issue 69, October 2013

a. Identify the strategic priority of VicHealth that is addressed by funding the Walk to School program. 1 mark

b. Outline how the Walk to School program supports VicHealth’s mission. 2 marks

c. i. Identify two priority action areas of the Ottawa Charter for Health Promotion. 2 marks

1. 

2. 

d. Local governments are often responsible for health promotion programs.

List two other responsibilities of local governments with regard to health and/or health funding. 2 marks

1. 

2. 

Question 11 (7 marks)

South Sudan, a country in Africa, is increasingly reliant on emergency aid, with the number of people in need of food aid increasing significantly. It is a country in conflict and needs urgent support to be able to provide enough food, water and essential services to its people.

Oxfam is a non-government organisation working in South Sudan to provide people with safe drinking water and toilets/latrines. It runs hygiene promotion activities to prevent the outbreak of disease and to educate people about safe hygiene practices. It also works with the World Food Programme to help distribute food supplies.

Source: adapted from www.oxfam.org.au

a. What is emergency aid?  

b. Use the Oxfam aid program provided to explain the interrelationships between health, human development and sustainability.
Question 12 (8 marks)

a. Many AIDS-related deaths occur in developing countries. Through Australia’s overseas aid program, a range of HIV/AIDS programs have been implemented.

Outline two reasons why the Department of Foreign Affairs and Trade (DFAT) would support the implementation of an HIV/AIDS program in a developing country to reduce the burden of disease. 2 marks

1. 

2. 

b. Describe one HIV/AIDS program that has been implemented in a developing country. 3 marks


c. DFAT works with a range of multilateral agencies, including WHO. WHO has developed a six-point agenda for action to improve global health.

Identify and explain one point from WHO’s six-point agenda for action. 3 marks


**Question 13** (4 marks)
Complete the following table by outlining one advantage and one disadvantage of the biomedical model of health and the social model of health.

<table>
<thead>
<tr>
<th></th>
<th>Biomedical model of health</th>
<th>Social model of health</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Disadvantage</strong></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Question 14 (7 marks)**

Millennium Development Goal 2 is to ‘achieve universal primary education’.

![Adjusted net enrolment rate in primary education, 1990, 2000 and 2011 (percentage)](image)

**a.** Using information from the graph, evaluate the progress made towards achieving universal primary education.  

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b. i. Describe the purpose of Millennium Development Goal 2. 2 marks

ii. State two reasons why it is important to achieve this goal. 2 marks

1. 

2. 
**Question 15** (11 marks)
Consider the following data about the Human Development Index (HDI) and measles vaccination.

<table>
<thead>
<tr>
<th>Country</th>
<th>Human Development Index (HDI)</th>
<th>Measles vaccination (% of one-year-olds)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>2010</td>
</tr>
<tr>
<td>Australia</td>
<td>0.938</td>
<td>94</td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>0.760</td>
<td>92</td>
</tr>
<tr>
<td>Benin</td>
<td>0.436</td>
<td>69</td>
</tr>
<tr>
<td>Central African Republic</td>
<td>0.352</td>
<td>62</td>
</tr>
</tbody>
</table>

Data: *Human Development Report 2013*, United Nations Development Programme (UNDP), New York, 2013, pp. 144–146 (Table 1) and pp. 166–169 (Table 7)

a. Describe the HDI.  

b. Using the data provided, describe the relationship between measles vaccination rates and the HDI.
c.  
   i. Describe an immunisation program that could be implemented that takes into consideration two elements of sustainability.  
   ii. Explain how the program could improve human development.
Question 16 (5 marks)
International Human Rights Day is observed on 10 December each year. Events are held on this
day to educate people on the importance of human rights.
In 2013, as part of an artwork by Mona Nicole Sfeir, WHO headquarters staff were invited to pour
water into 365 glasses, each representing a day of the year. Each glass contained different words
representing a human rights issue that affects global health. The words were written in ink that
would dissolve in water. The aim of this event was to represent visually the disappearance of human
rights.

a. Provide one example of a human rights issue that could have been in any of the 365 glasses. 1 mark

b. i. Explain what is meant by ‘global health’. 2 marks

ii. Outline how the example of human rights provided in part a. could impact on global
health. 2 marks
Extra space for responses
Clearly number all responses in this space.

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TURN OVER
An answer 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 answer book. At the end of the examination, place the answer book inside the front cover of this question and answer book.