HEALTH AND HUMAN DEVELOPMENT

Written examination

Friday 6 November 2009
Reading time: 11.45 am to 12.00 noon (15 minutes)
Writing time: 12.00 noon to 2.00 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>10</td>
<td>10</td>
<td>90</td>
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</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
- Question and answer book of 15 pages.

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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Question 1
Injury has a major impact on the health of Australians. It affects Australians of all ages. It is the greatest cause of death in the first half of life and leaves many with serious disability. In 2003 injuries accounted for 7.5% of Disability Adjusted Life Years (DALYs).

a. Define the term Disability Adjusted Life Years (DALYs).

b. One reason why Injury Prevention and Control has been identified as a National Health Priority Area is its contribution to the burden of disease.
   Identify one other reason to explain why it is a National Health Priority Area.

c. Injury and poisoning account for 75% of male and 57% of female deaths in the 15–24 year age group. Select one example of intellectual, emotional or social development and describe how it might contribute to the high levels of death associated with injury and poisoning for this age group.
   Type of development

Question 1 – continued
d. Describe a strategy that has been or could be implemented by any level of government that would reduce the death rates associated with injury and poisoning for the 15–24 year age group.

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__________________________________________________________________________

__________________________________________________________________________

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__________________________________________________________________________

3 marks
Total 8 marks

Question 2
In June 2008, the federal government made a commitment to the development of a national men’s health policy. The policy will aim to address health issues that men face in relation to
• accessing health services
• engaging men about their health
• raising awareness of the range of preventable health problems.
Use these issues to justify two reasons why the government should develop a national men’s health policy.
Reason 1
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

Reason 2
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

2 + 2 = 4 marks
Question 3


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<tr>
<td>From birth</td>
<td>55.2 years</td>
<td>78.5 years</td>
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<tr>
<td>From 30 years</td>
<td>66.5 years</td>
<td>79.7 years</td>
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</tbody>
</table>

Source: Adapted from Australian Institute of Health and Welfare, *Australia’s Health* 2008 p. 27

a. Define life expectancy.

b. Explain two reasons why life expectancy has increased since 1901.
   Reason 1

   Reason 2

   2 + 2 = 4 marks

c. Outline why life expectancy from 30 years of age is higher than life expectancy from birth.

   2 marks

Total 7 marks
Question 4
Approaches to health care have changed over time in response to the changes in the types of diseases prevalent in the community.

a. Briefly describe biomedical and preventative approaches to health care.

Biomedical approach

Preventative approach

b. List two examples that represent a biomedical approach to health.

1.

2.

2 marks

c. Identify two advantages of the preventative approach to health care.

1.

2.

2 marks
d. Identify two principles of the social model of health. Give one example of how each principle is reflected in health services in Australia.

<table>
<thead>
<tr>
<th>Principle 1</th>
<th>Example</th>
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<table>
<thead>
<tr>
<th>Principle 2</th>
<th>Example</th>
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3 + 3 = 6 marks
Total 14 marks
Question 5

The graph below shows the prevalence of obesity of females according to socioeconomic status (SES).

Source: Adapted from Australian Institute of Health and Welfare, Australia’s Health 2008

a. Describe the relationship between socioeconomic status and obesity in females shown in the graph.

b. Variations in health status arise from a combination of
   • attitudes, knowledge and beliefs
   • environment
   • lifestyle and behavioural factors.

Choose two of these factors and explain how they could contribute to differences in the prevalence of obesity between females from the lowest and highest socioeconomic status.

Factor 1

Explanation

Factor 2

Explanation

2 + 2 = 4 marks
c. Describe the role of nutrition as a **protective** factor against obesity.


d. The direct and indirect consequences of obesity in Australia have increased from $21 billion in 2005 to $58 billion in 2008.

Outline one possible direct and one possible indirect consequence of obesity for the individual and the community in the table below.

<table>
<thead>
<tr>
<th></th>
<th>Direct consequence</th>
<th>Indirect consequence</th>
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</thead>
<tbody>
<tr>
<td>Individual</td>
<td></td>
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<tr>
<td>Community</td>
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3 marks

4 marks

Total 12 marks

**Question 6**

Nutrition Australia plays a key role in promoting healthy eating.

Briefly explain two ways that Nutrition Australia achieves this aim.

1. 

2. 

2 + 2 = 4 marks
Question 7
Percentile charts can be used to monitor a child’s growth over time to ensure that physical development is progressing as expected. The growth pattern of a child can be compared against norms for children of similar ages.

The following percentile chart compares the pattern of weight for two girls aged from birth to 36 months.

Source: Adapted from www.education.vic.gov.au

a. Use the information in the chart to compare growth patterns for the weight of the two girls, Sasha and Emily.

___________________________________________________________________________________________________________________________________________________________

2 marks

Question 7 – continued
TURN OVER
b. i. Explain one inherited factor that could account for the differences in weight between Sasha and Emily.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

ii. Explain one environmental factor that could account for the differences in weight between Sasha and Emily.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

3 + 3 = 6 marks
Total 8 marks
Question 8

a. Identify one characteristic of physical, social, emotional and intellectual development that can be predicted for children during the infancy stage of the lifespan.

Physical development

Social development

Emotional development

Intellectual development

b. Adequate nutrition during infancy is important for the growth of soft tissue, hard tissue, blood and the production of energy.

i. Identify two major nutrients necessary for the development of soft tissue.

• __________________________

ii. Describe the role of these nutrients and outline how they interrelate for the development of soft tissue.


2 + 4 = 6 marks
c. Poor nutrition early in life has been linked to poor health outcomes in adults. Briefly discuss two examples of how poor nutrition during infancy and childhood can impact on adult health.

Example 1


Example 2


2 + 2 = 4 marks
Total 14 marks
Question 9

Access to safe water and sanitation is a problem in many developing countries.

a. Outline two possible consequences of lack of safe water and/or sanitation for the physical and intellectual development of children in late childhood.

<table>
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<tr>
<th>Consequences for physical development</th>
<th>Consequences for intellectual development</th>
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4 marks

b. Outline two possible consequences for physical health that drinking contaminated water may have on children in late childhood.

1. ........................................................................................................
   ........................................................................................................

2. ........................................................................................................
   ........................................................................................................

2 marks

Total 6 marks
Question 10

a.  i. Identify three key elements of sustainable primary health care.

1. ____________________________

2. ____________________________

3. ____________________________

ii. Using these three key elements, describe a strategy that could be implemented in a developing country to ensure that a sustainable water supply is available to the people.

________________________________________

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3 + (3 × 2) = 9 marks
b. Briefly outline two ways the Australian Government could contribute to the improvement of the water supply in a developing country.

1. 

2. 

2 + 2 = 4 marks
Total 13 marks