

STUDENT NUMBER  Letter

# HEALTH AND HUMAN DEVELOPMENT

## Written examination

Thursday 3 November 2016

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

<i>Number of questions</i>	<i>Number of questions to be answered</i>	<i>Number of marks</i>
15	15	100

- 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 correction fluid/tape.
- No calculator is allowed in this examination.

#### Materials supplied

- Question and answer book of 20 pages.
- 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.**

**Instructions**

Answer **all** questions in the spaces provided.

**Question 1** (6 marks)

- a. List **one** service that is covered by Medicare and explain how this service can improve the health status of Australians. 2 marks

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- b. Select two values of the Australian healthcare system and explain how each value is shown in the funding and/or administration of public hospitals. 4 marks

Value 1 \_\_\_\_\_

Explanation \_\_\_\_\_

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Value 2 \_\_\_\_\_

Explanation \_\_\_\_\_

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**Question 2** (8 marks)

The following data relates to the health status of Indigenous and non-Indigenous Australians.

	<b>Prevalence of diabetes mellitus (age-standardised per cent)*</b>	<b>Incidence of type 1 diabetes (per 100 000)†</b>	<b>Mortality with diabetes as underlying cause (per 100 000)*</b>
<b>Indigenous</b>	15	7	89.4
<b>Non-Indigenous</b>	4.7	10	15.6

Data: \*Australian Institute of Health and Welfare, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples 2015*, cat. no. IHW 147, AIHW, Canberra, 2015;

†Australian Institute of Health and Welfare, *Incidence of Type 1 Diabetes in Australia 2000–2013*, 'Diabetes' series no. 23, cat. no. CVD 69, AIHW, Canberra, 2015

- a. Use data from the table to compare the health status of Indigenous and non-Indigenous Australians.

2 marks

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- b. Identify one nutrient that can act as a risk factor for type 2 diabetes. List one major food source of this nutrient and outline the nutrient's function as a determinant of health.

3 marks

<b>Nutrient</b>	
<b>Major food source</b>	
<b>Function as a determinant of health</b>	

c. Describe **one** program that has been implemented to address the National Health Priority Area (NHPA) 'Diabetes mellitus'.

3 marks

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**Question 3** (3 marks)

Outline one function of each of the following nutrients as a determinant of health.

- Protein \_\_\_\_\_  
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- Calcium \_\_\_\_\_  
\_\_\_\_\_
- Vitamin D \_\_\_\_\_  
\_\_\_\_\_

**Question 4** (4 marks)

The federal government developed the Australian Dietary Guidelines. Nutrition Australia has used these guidelines as the basis for the development of the Healthy Eating Pyramid.

Choose two of the Australian Dietary Guidelines and explain how each is reflected in the Healthy Eating Pyramid.

1. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Question 5** (2 marks)

Consider the following information regarding the health status of Australia and other developed countries.

**Indicators of health status for a range of countries (2013)**

Country	Adult mortality rate (deaths per 1000)		Infant mortality rate (deaths per 1000 live births)	Life expectancy at birth	Incidence of tuberculosis (per 100 000 per year)
	Male	Female			
Australia	78	45	3.4	83	6.2
Iceland	61	37	1.6	82	3.6
Japan	81	42	2.1	84	18

Data: World Health Organization, 'Part II. Global Health Indicators', *World Health Statistics 2015*

Using data from the table, describe the health status of Australia compared to Iceland and Japan.

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**Question 6** (6 marks)

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this material is not supplied.

Source: Jerril Rechter, 'Our Sportswomen Shining Worldwide', *Herald Sun*, 11 August 2015

- a.** Identify **one** VicHealth strategic priority in the 'Changing the Game' program described above. 1 mark

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- b.** Outline the potential mental and social health outcomes of VicHealth's 'Changing the Game' program. 2 marks

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- c.** One of the principles of the social model of health is that it 'addresses the broader determinants of health'.  
Explain this principle and provide an example of how it is evident in VicHealth's 'Changing the Game' program. 3 marks

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**Question 7 (8 marks)**

Injuries are a significant cost to the healthcare system in Australia. 'Injury prevention and control' was declared an NHPA in 1996.

- a.** Provide two reasons, other than cost, why 'Injury prevention and control' was included as an NHPA. 2 marks

1. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- b.** Provide one example each of an indirect cost to the individual and to the community associated with 'Injury prevention and control'. 2 marks

Indirect cost to the individual \_\_\_\_\_

\_\_\_\_\_

Indirect cost to the community \_\_\_\_\_

\_\_\_\_\_

- c.** Explain how two action areas of the Ottawa Charter for Health Promotion could be used to address the NHPA 'Injury prevention and control'. 4 marks

1. \_\_\_\_\_

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2. \_\_\_\_\_

\_\_\_\_\_

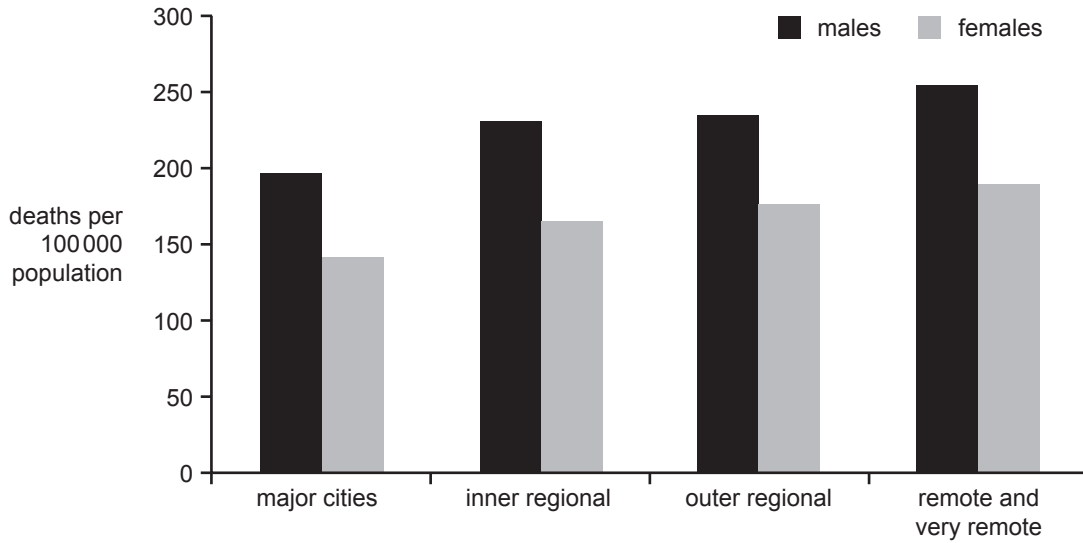
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**Question 8** (12 marks)

**Cardiovascular disease death rates, by remoteness and sex, 2009–2011**



Source: Australian Institute of Health and Welfare, *Cardiovascular Disease, Diabetes and Chronic Kidney Disease – Australian Facts: Mortality*, ‘Cardiovascular, Diabetes and Chronic Kidney Disease’ series no. 1, cat. no. CDK 1, AIHW, Canberra, 2014

- a.** Identify **one** trend in the graph above. 1 mark

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- b.** Identify one biological and one social determinant of health and explain how each could contribute to the trend identified in **part a.** 4 marks

Biological \_\_\_\_\_

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Social \_\_\_\_\_

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**c.** Cardiovascular diseases contribute to 14% of the total burden of disease in Australia and New Zealand.

**i.** What is meant by ‘burden of disease’?

2 marks

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**ii.** How is burden of disease measured?

1 mark

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**d.** Explain how both the biomedical and social models of health could be used to reduce the burden of disease associated with cardiovascular disease.

4 marks

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**Question 9** (10 marks)

Goal 16 of the United Nations' (UN's) Sustainable Development Goals aims to promote peace, justice and strong institutions.

- a.** Describe Goal 16. 2 marks

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- b.** Explain two reasons why Goal 16 is important. 4 marks

1. \_\_\_\_\_

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2. \_\_\_\_\_

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- c.** Goal 16 reflects the UN's area of action 'world peace and security'.

Identify another area of action of the UN and explain how it promotes sustainable human development. 4 marks

Area of action \_\_\_\_\_

Explanation \_\_\_\_\_

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**Question 10** (9 marks)

The following information relates to an HIV/AIDS prevention and control program delivered by World Vision in Tashkent, Uzbekistan. The program was aimed at reducing the HIV infection rate.

The program aimed to promote behavioural change among youth and most at risk populations (MARPs). MARPs include injecting drug users, sex workers and men who have sex with men. The program covered a wide range of activities including: needle exchange, condom distribution, health education, counselling, HIV/STI health referrals, outreach work, staff training, and the establishment of an information website. There were also advocacy initiatives focused around World Aids Day (2004).  
Over 24 months a total of 24 000 visitors used the facility: 32% for the needle exchange program, 26% for counselling activities, 21% for HIV and/or STI tests, 21% for other services.

Source: World Vision Australia, *Basic Health and HIV*, policy brief, November 2007, p. 3;  
© World Vision Australia 2007; all rights reserved; used by permission; www.worldvision.com.au

- a. Identify the type of aid represented in the HIV/AIDS prevention and control program above. 1 mark

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- b. Using **two** elements of sustainability, evaluate the HIV/AIDS prevention and control program. 4 marks

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- c. Explain how the HIV/AIDS prevention and control program could bring about improvements in health. 2 marks

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- d.** Health and human development are interrelated. That is, health influences human development and, in return, human development influences health.

Use **one** example from the HIV/AIDS prevention and control program to illustrate how health and human development are interrelated.

2 marks

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**Question 11** (6 marks)

The Australian aid program focuses on the Indo-Pacific region.

- a.** Education and health form one priority of Australia's aid program.

Identify another priority of Australia's aid program.

1 mark

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- b.** Describe **one** literacy program that may be implemented in the Indo-Pacific region to increase education levels.

3 marks

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- c.** Outline how the literacy program described in **part b.** could improve human development in the Indo-Pacific region.

2 marks

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**Question 12** (8 marks)

The World Health Organization (WHO) is part of the UN and was established in 1948. It works to promote global health and sustainable human development. One WHO initiative is the development of the Framework Convention on Tobacco Control. This framework seeks to reduce smoking rates worldwide.

- a. Identify a WHO priority that is reflected in the Framework Convention on Tobacco Control initiative. 1 mark

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- b. Select one of the UN’s Sustainable Development Goals and discuss how the Framework Convention on Tobacco Control could help achieve this goal by 2030. 3 marks

Goal \_\_\_\_\_

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Discussion \_\_\_\_\_

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- c. Define ‘global health’. 2 marks

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- d. Explain how the achievement of the Sustainable Development Goal selected in **part b.** could contribute to promoting global health. 2 marks

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**Question 14** (5 marks)

Obesity is placing a heavy burden on the world’s population in both rich and poor countries. Almost 30 per cent of people globally are now either obese or overweight. Two-thirds of the obese population now live in developing countries, which also experience high rates of undernutrition.

- a. Explain how global marketing has contributed to the increase in the number of people who are overweight or obese. 2 marks

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- b. Undernutrition is much more prevalent in developing countries than in Australia. Select one example of the physical environment and explain how it could contribute to this variation. 3 marks

Example \_\_\_\_\_

Explanation \_\_\_\_\_

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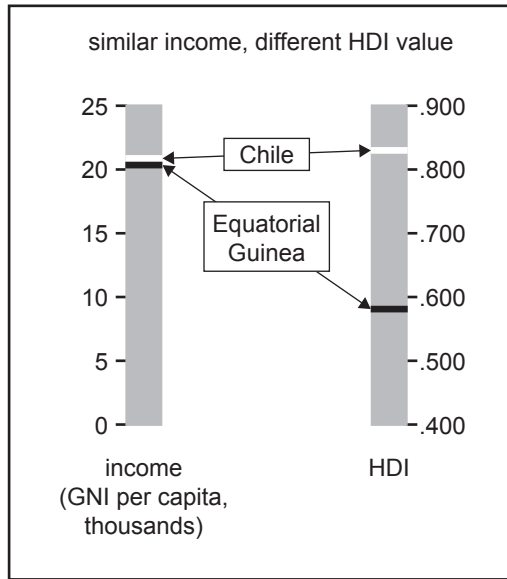
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**Question 15** (4 marks)

The following graph compares the income and Human Development Index (HDI) of Chile and Equatorial Guinea.



Source: United Nations Development Programme, *Human Development Report 2015: Work for Human Development*, UNDP, New York, 2015, p. 57

- a. Explain how two countries can have a similar income (GNI per capita) but a quite different HDI.

2 marks

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- b. WHO classifies countries according to their mortality strata. Chile is classified as being in strata B while Equatorial Guinea is classified as being in strata D.

Why would Chile be classified as mortality strata B and Equatorial Guinea be classified as mortality strata D?

2 marks

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