



Victorian Certificate of Education 2010

SUPERVISOR TO ATTACH PROCESSING LABEL HERE

STUDENT NUMBER

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Letter

HEALTH AND HUMAN DEVELOPMENT Written examination

Friday 5 November 2010

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

Section	Number of questions	Number of questions to be answered	Number of marks
A	12	12	30
B	6	6	70
Total 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 white out liquid/tape.
- No calculator is allowed in this examination.

Materials supplied

- Question and answer book of 16 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.

SECTION A

Question 1

From September 2009, mandatory folic acid fortification requires Australian flour millers to add folic acid (a form of the B vitamin folate) to wheat flour for bread-making purposes. This means that most bread (except organic) in Australia will contain folic acid.

- a. Identify one health benefit of fortifying bread with folic acid.

1 mark

- b. Name the main organisation responsible for monitoring folic acid fortification and for governing the safety and quality of food in Australia.

1 mark

Question 2

Briefly outline two indicators that are used to measure the health status of populations.

1. _____

2. _____

4 marks

Question 3

Explain how Medicare may influence the health status of Australians.

3 marks

SECTION A – continued

Question 4

List two characteristics used by the World Health Organization (WHO) to describe a developing country.

1. _____

2. _____

2 marks

Question 5

Identify and then explain one dimension of health.

2 marks

Question 6

Define the following.

glycaemic index _____

bilateral aid _____

2 marks

Question 7

Outline two major characteristics of the biomedical model of health.

1. _____

2. _____

2 marks

Question 8

Name the Millennium Development Goal that relates specifically to gender equality.

1 mark

SECTION A – continued
TURN OVER

Question 9

The following table indicates the leading causes of death in 2004 globally, compared with the leading causes of death predicted in 2030.

Table 1. Leading causes of death globally – ranked 1 to 15 for 2004 and 2030 (predicted)

Leading causes of death, 2004 and 2030 compared			
2004		2030	
Disease or Injury	Rank	Rank	Disease or Injury
ischaemic heart disease	1	1	ischaemic heart disease
cerebrovascular disease	2	2	cerebrovascular disease
lower respiratory infections	3	3	chronic obstructive pulmonary disease
chronic obstructive pulmonary disease	4	4	lower respiratory infections
diarrhoeal diseases	5	5	road traffic injuries
HIV/AIDS	6	6	trachea, bronchus, lung cancers
tuberculosis	7	7	diabetes mellitus
trachea, bronchus, lung cancers	8	8	hypertensive heart disease
road traffic injuries	9	9	stomach cancer
prematurity and low birthweight	10	10	HIV/AIDS
neonatal infections and other	11	11	nephritis and nephrosis
diabetes mellitus	12	12	self-inflicted injuries
malaria	13	13	liver cancer
hypertensive heart disease	14	14	colon and rectum cancer
birth asphyxia and birth trauma	15	15	oesophagus cancer

Adapted from: www.who.int p. 33

- a. Global marketing is considered to have a major influence on health status. Select one leading cause of death that is predicted to rise in ranking from 2004 to 2030 that could be due to the influence of global marketing.

1 mark

- b. Describe how global marketing might contribute to this increased ranking.

2 marks

Question 10

- a. Outline the circumstances under which the United Nations provides humanitarian assistance.

1 mark

- b. Describe one example of humanitarian assistance.

2 marks

Question 11

Explain, using one example, how AusAID improves sustainable human development.

2 marks

Question 12

Use two examples of determinants of health to explain why males are more likely to be seriously injured in road traffic crashes than females.

1. _____

2. _____

4 marks

SECTION B

Question 1

Jeanette has been diagnosed with the early symptoms of Diabetes Mellitus Type II. She lives in the City of Moonee Valley and has been asked by the health promotion officer at the Council to be involved in the '*Life!*' program. Diabetes Australia Vic. has ranked the City of Moonee Valley 57th in Victoria for the number of cases of Diabetes Mellitus. Although not considered a 'hot spot' it has had an increase of 94% in the prevalence of Diabetes in its population.

Source: Diabetes Australia

- a. Define prevalence.

1 mark

- b. Briefly outline two reasons for the inclusion of diabetes mellitus as a National Health Priority Area.

1. _____

2. _____

2 marks

- c. A major part of the '*Life!*' program is based on the achievement of four goals which include

- no more than 30% of total energy intake from **fat**
- no more than 10% of total energy intake from **saturated fat**
- at least 30 min/day moderate **physical activity**
- at least 5% **weight reduction**.

Apart from providing energy in an individual's diet, outline one function and one major food source of

i. saturated fat

ii. fibre

in the table below.

	Function	Major food source
saturated fat		
fibre		

2 + 2 = 4 marks

- d. Promoting healthy eating is a major focus of the ‘*Life!*’ program, a local government initiative. The Australian Government also plays an important role in promoting healthy eating. Identify two ways in which the Australian Government promotes healthy eating and how these promotions could reduce the prevalence of diabetes mellitus.

1. _____

2. _____

6 marks

Question 2

The 2007 Australian National Children's Nutrition and Physical Activity Survey's key findings were that only 1% of 14–16-year-old boys and girls consumed sufficient fruit and 5% of 14–16-year-old boys and girls met the dietary guideline for vegetable intake.

- a. Identify two ways in which the Australian Government could use the nutrition information from surveys like this.

1. _____

2. _____

2 marks

- b. i. Identify two National Health Priority Areas (NHPAs) where fruit and vegetable intake is a protective factor.

1. _____

2. _____

- ii. Select one of these NHPAs and describe how fruit and vegetable intake acts as a protective factor.

- iii. Briefly outline one direct cost of this NHPA to the community.

2 + 2 + 1 = 5 marks

- c. Describe one way in which a nongovernment organisation could use this data to increase fruit and vegetable consumption by 14–16-year-old boys and girls.

3 marks

SECTION B – continued

Question 3

The following information is about the program LEAD (Localities Embracing and Accepting Diversity).

Greater Shepparton City Council has been awarded this program by the Victorian Health Promotion Foundation (VicHealth) aimed at improving community acceptance of cultural diversity. The VicHealth Chief Executive Officer said that communities that support cultural diversity have been found to have better health outcomes.

The focus is on the community as a whole, not just on people from migrant, refugee and Aboriginal communities affected directly by discrimination or racism.

The responses will include a range of different approaches such as communications, community development, and supporting organisations with training and other resources.

Working across settings such as education, employment, and sport and recreation, the LEAD program plans to support local organisations to

- ensure that environments are safe and welcoming for people from a range of cultural backgrounds
- increase understanding and empathy among different community groups
- ensure fairer outcomes for all.

A goal is to identify what works when it comes to reducing discrimination and promoting diversity at the local level.

Adapted from: www.vichealth.vic.gov.au

- a. Describe two principles of the social model of health and explain how they are evident in this program.

1. _____

2. _____

6 marks

- b. Using the elements that ensure sustainability of programs, predict the potential contribution to sustainable human development of this VicHealth-funded program.

5 marks

Question 4

- a. In developing regions most of the burden of collecting drinking water falls on women and girls.
Explain how this burden may impact on human development.

2 marks

- b. Explain how increasing access to safe drinking water promotes health and sustainable human development.

Health

Sustainable human development

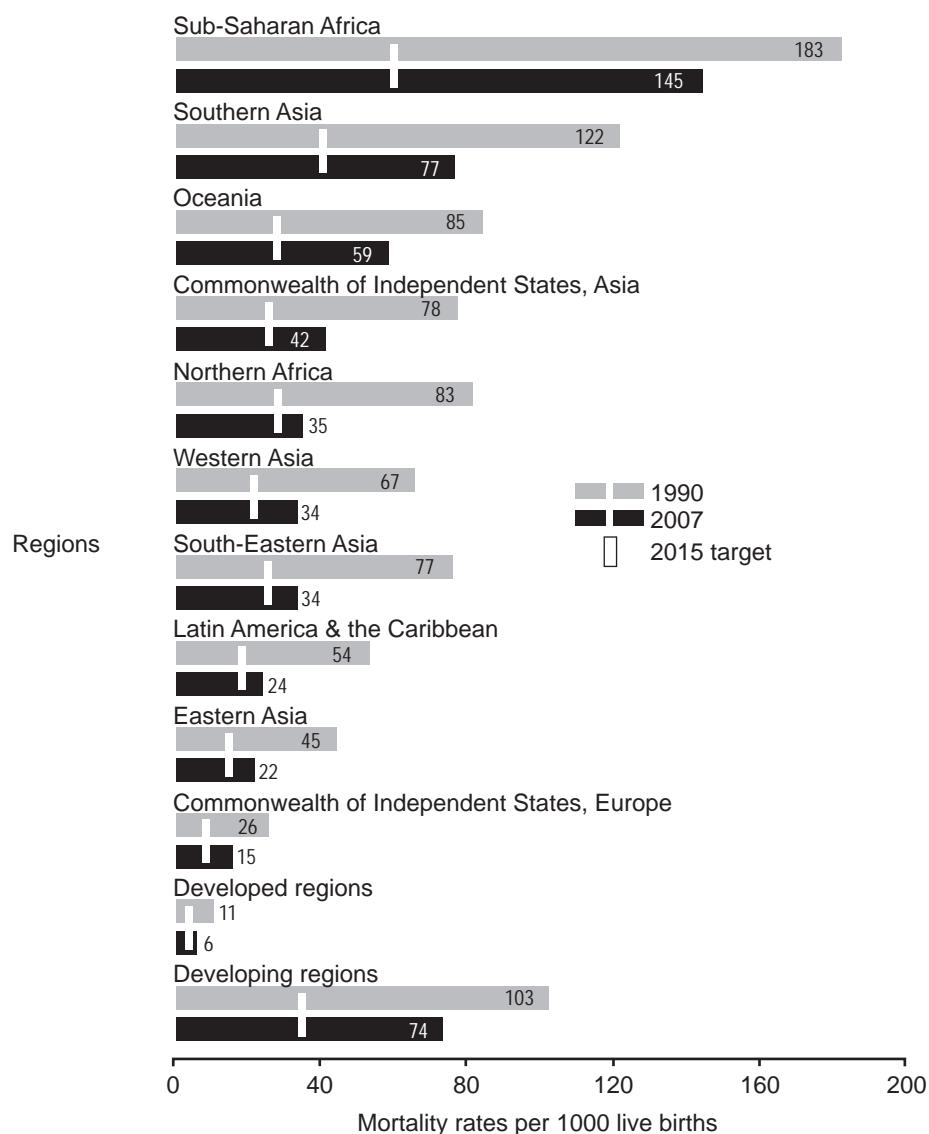
6 marks

Question 5

One of the Millennium Development Goals is to reduce child mortality, with a specific target to reduce the under-five mortality rate by two thirds between 1990 and 2015.

Table 2 below shows under-five mortality rates per 1000 live births for 1990 and 2007 and includes the targets for 2015 for a range of regions and for developed and developing regions.

Table 2. Goal 4: Reduce child mortality



Source: United Nations 2009. The Millennium Development Goals Report 2009: New York, p. 24

- a. Identify the region where the greatest effort is required to achieve the 2015 target.

1 mark

- b. Using the information in Table 2, evaluate the progress made by developed and developing regions towards reducing child mortality between 1990 and 2007.

2 marks

- c. Identify one example of a nongovernment organisation that promotes global health and sustainable human development. Describe one strategy it could implement to help achieve the Millennium Development Goal of reducing child mortality.

Nongovernment organisation

Strategy

1 + 3 = 4 marks

Question 6

The following information is about Ethiopia – a country located in Africa.

- Ethiopia ranks 27th in the world in under-five mortality rates, with a rate of 210 per 1000 and an infant mortality rate of 69 per 1000.
- Ethiopians have a life expectancy of 55 years.
- One third of the population survive on less than \$US1 per day.
- Children in Ethiopia are orphaned as a result of HIV/AIDS. This has increased the number of child-only household families and the burden on the elderly, particularly the grandparents and the community. Ethiopia has the largest HIV/AIDS infected population in the world, contributing to very high adult mortality.
- Access to basic and quality education and educational materials in Ethiopia is generally low. Female enrolment/attendance compared to male is low.
- The total adult literacy rate is 36%.
- Children in Ethiopia die from childhood diseases that could easily be prevented through immunisation and basic health services.
- Access to clean water and sanitation facilities are inadequate.
- Malnutrition affects a large proportion of the population. Children in particular are highly affected by malnutrition.

Adapted from: www.unicef.org

- a. Identify the mortality strata that Ethiopia belongs to according to the WHO classification and justify your choice.

Mortality strata

Justification

1 + 2 = 3 marks

- b. Explain the likely influence of income and gender equality on health status in Ethiopia.

Income

Gender equality

6 marks

- c. The overall goal of the United Nations (UN) Ethiopia country program (through its UNICEF program) is to support the national and regional efforts towards the realisation of the rights of the child to survival, development, protection and participation, with the following priority areas.
- girls education
 - integrated policies for early childhood development
 - immunisation
 - HIV/AIDS prevention among children
 - food supplementation

Adapted from: www.unicef.org

- i. Describe an HIV/AIDS program that could be introduced into Ethiopia including reasons why the program should be introduced, the types of aid that could be used and how it might be implemented.

Description _____

Types of aid _____

Implementation _____

- ii. Use this program to discuss the interrelationship between health, human development and sustainability.

6 + 6 = 12 marks



The Place To Be