



SUPERVISOR TO ATTACH PROCESSING LABEL HERE

Victorian Certificate of Education 2008

| | STUDENT NUMBER | | | | | | Letter | |
|---------|----------------|--|--|--|--|--|--------|--|
| Figures | | | | | | | | |
| Words | | | | | | | | |

HEALTH AND HUMAN DEVELOPMENT Written examination

Friday 7 November 2008

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 | |
|------------------------|---------------------------------------|--------------------|
| Number of questions | Number of questions to be answered | Number of marks |
| 7 | 7 | 86 |

- 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 17 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.

Menopause is the time in a woman's life when menstrual periods stop. It is a natural occurrence and marks the end of the reproductive years, just as the first menstrual period during puberty marked the start . . . Most women reach menopause between the ages of 45 and 55, the average being around 50 years.

Source: adapted from http://www.betterhealth.vic.gov.au/BHCV2/bhcarticles.nsf/pages/ Menopause?OpenDocument

a. Besides menopause, identify two other examples of **physical development** that typically occur in females during middle adulthood.

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| 2. | | | |
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2 marks

b. Describe one example of how menopause may impact on the **emotional health or development** of a woman during middle adulthood.

2 marks

Menopause is associated with changes in the level of hormones.

c. i. Identify two hormones associated with menopause.

2.

ii.

- 1. _____
- Outline the changes that occur in the levels of these hormones during menopause.

As males and females age, they are more likely to develop osteoporosis.

a. What is osteoporosis?

1 mark

The graph below shows the relationship between bone density and ageing in males and females.

Due to copyright restriction, this material is not supplied.

Source: http://www.bonedensitytesting.com.au/pages/default.cfm?page_id=19695

b. Use the information on the graph to identify two **similarities** and two **differences** in the bone mass between males and females.

| Similarities | Differences |
|--------------|-------------|
| 1 | 1 |
| | |
| | |
| | |
| 2 | 2 |
| | |
| | |
| | |

4 marks

c. How may osteoporosis impact on the emotional health of a male or female?

2 marks

d. Explain the role of nutrition as a protective factor against osteoporosis.

| 5 |
|---------|
| 5 marks |

Total 12 marks

The Australian Guide to Healthy Eating suggests daily sample serves from all food groups. Table 1 shows the recommended daily sample serves suggested for women.

Table 1

| Women | Breads, cereals, rice, pasta, noodles | Vegetables, legumes | Fruit | Milk, yoghurt, cheese | Meat, fish, poultry, eggs, nuts, legumes | Extra foods |
|------------------------|--|------------------------|-------|-----------------------------|---|------------------|
| Women 19–60 years | 4–9 | 5 | 2 | 2 | 1 | $0-2\frac{1}{2}$ |
| Breastfeeding women | 5–7 | 7 | 5 | 2 | 2 | $0-2\frac{1}{2}$ |

Source: Adapted from The Australian Guide to Healthy Eating, Commonwealth of Australia, Canberra, 1998

a. Choose one of the food groups where the number of serves increases for breastfeeding women.

- **i.** Identify a main nutrient from that food group.
- ii. Why is an increased serving recommended for breastfeeding women?

1 + 2 = 3 marks

c.

Nutrients are required for the formation of soft and hard tissues, blood and to provide energy.

b. Describe the interrelationships of the major nutrients in the formation of blood or energy.

| Blood | or | Energy (circle one) |
|----------|------------|---|
| Major nu | utrients _ | |
| | | |
| D : / | | |
| Descript | 10n | |
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| | | |
| | | 2 + 2 = 4 marks |
| | | strength and a weakness of <i>The Australian Guide to Healthy Eating</i> as a nutritional tool women. |
| Strength | | |
| | | |
| | | |
| Weaknes | ŝs | |

2 marks Total 9 marks

1.

2. _____

In 2000, the United Nations (UN) set out the Millenium Development Goals as a framework for development. The target date for meeting these goals is 2015. One of the United Nations' millenium goals is to 'promote gender equality and empower women'. AusAID has been working in partnership with an agency called Building Resources Across Communities (BRAC) in Bangladesh whose target group is very poor women. Its main goal is to find sustainable living options for the very poor.

Read the following case and then answer the questions below.

Suva Rani did not complete year three at primary school. At 15 she married. She and her husband often went hungry when her husband, a day labourer, was out of work. Yet Suva gave birth to four children. This brought the couple much joy but also worsened their poverty.

In 2002, along with other poor women, Suva enrolled in an AusAID-funded BRAC microfinance program. She was shown how to manage a loan of about \$80 to start up a rice-husking business. She worked hard to make her business a success and was very careful to make regular repayments on her loan. She was able to take out a second loan for a cow-rearing business and sold milk in the local markets. She was then able to save enough money to rent a piece of land for her husband to cultivate and finally saved enough money to build a well and install a sanitary toilet in her house.

Today she stands proudly as a self-reliant woman. Each of her children goes to school, her family is healthy and well-nourished. They can all look toward a bright future.

Adapted from: A break from BRAC, *Focus*, Australian Agency for International Development (AusAID), Canberra, Sept.–Dec. 2007, pp. 27–28

- **a.** Outline two benefits to health **and/or** development of introducing the BRAC project in a developing country like Bangladesh.

2 marks

b. Using two elements of sustainable primary health care, evaluate the likely effectiveness of the BRAC project in a developing country like Bangladesh.

| Element 1 |
|------------|
| Evaluation |
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| Element 2 |
| Evaluation |
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4 + 4 = 8 marks

The United Nations Millenium Development Goals include

- achieve universal primary education
- improve maternal health
- eradicate (remove) extreme poverty and hunger
- combat HIV/AIDS, malaria and other diseases.

Select one of these goals to answer parts c. and d.

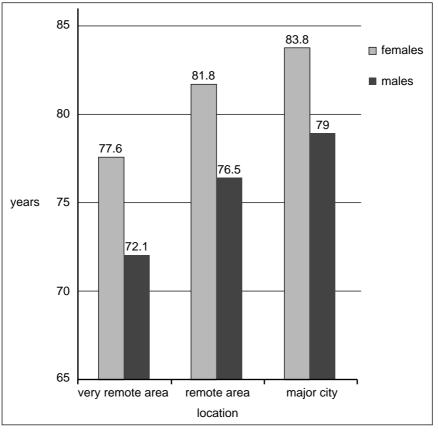
Name of goal _____

c. Justify why the United Nations may have selected this goal for health and development.

3 marks

> 3 marks Total 16 marks

The following graph compares the life expectancy of males and females according to the remoteness of where they live.



Life expectancy by location of where they live 2002–2004

Source: Adapted from the Australian Institute of Health and Welfare, Rural, regional and remote health 2008, p. 52

a. Define the term life expectancy.

1 mark

b. Use the information in the graph above to compare the life expectancy of males and females according to where they live.

| Female | | |
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| Male | | |
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Table 2 shows the difference in the prevalence of self-reported conditions in **metropolitan** areas compared to **inner regional** and **outer regional and remote** areas.

| Table 2. The prevalence of self-reported conditions 2004–2005 for inner regional and outer regional and remote |
|--|
| compared with metropolitan areas |

| | Inner regional Increase in % compared with the metropolitan area | Outer regional and remote Increase in % compared with the metropolitan area |
|--------------------|---|---|
| Diabetes | 3% | 4% |
| Asthma | 22% | 8% |
| Arthritis | 24% | 23% |
| Injuries | 20% | 21% |
| Depression | 15% | 4% |
| Overweight/obesity | 5% | 12% |

Source: Adapted from Australian Institute of Health and Welfare, Rural, regional and remote health 2008

c. i. Compare the self-reported health status of those living in metropolitan areas with those living in inner regional and outer regional and remote areas for asthma, injuries and overweight/obesity. Asthma

Injuries

Overweight/obesity

ii. Discuss two environmental factors that might account for the differences in self-reported injuries between those living in metropolitan areas and those living in outer regional and remote areas.

 iii. Discuss two lifestyle and behavioural factors that might account for the differences in overweight/ obesity rates between those living in the metropolitan area and those living in outer regional and remote areas.

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| | 3 + (3 + 3) + (3 + 3) = 15 marks |

Total 18 marks

In April 2008, the federal government made obesity a national health priority area.

a. Explain two reasons why obesity has been included as a national health priority area.

| 1 | |
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| | 4 marks |

Consider the following graph that shows the prevalence of obesity of first-grade children in Chile, a developing country in the world health regions with low mortality.

Trends in the prevalence of obesity of Chilean first-grade children

Due to copyright restriction, this material is not supplied.

Source: http://www.scielo.br/pdf/csp/v19s1/a09v19s1.pdf pg4

| b. | i. | Identify two trends evident in the | graph. |
|----|----|------------------------------------|--------|
|----|----|------------------------------------|--------|

1. _____

2.

| ii. | Explain two | factors | that | might | account | for | the | trend | in | obesity | rates | for | first-grade | children | in |
|-----|-------------|---------|------|-------|---------|-----|-----|-------|----|---------|-------|-----|-------------|----------|----|
| | Chile. | | | | | | | | | | | | | | |

2._____

1._____

TURN OVER

Marco is 29 years of age and is married to Theresa, aged 28. They have two sons aged 5 and 2. Marco is in good health, rarely having to visit the doctor. He is quite active, riding his bicycle regularly for 2 hours each Saturday morning. He also plays indoor cricket one night a week. Marco and Theresa enjoy taking the boys to the beach or park each weekend. Marco's parents care for the boys one Saturday night each month so Marco and Theresa can go out for dinner.

a. Outline two characteristics of physical **and** intellectual development that can be predicted for individuals in Marco's stage of the lifespan.

 Physical development

 1.

 2.

 Intellectual development

 1.

 2.

 2.

 4 marks

b. Outline how Marco's family might affect his social and emotional development. Social development

Emotional development

2 marks

Physical activity is an example of a lifestyle and behavioural factor.

c. Discuss how Marco's level of physical activity might influence his short- and long-term health. Short term

2 + 2 = 4 marks

Marco has been advised by his parents to take out private health insurance before his 30th birthday.

d. i. What is private health insurance?

Long term

ii. Why would Marco be advised to take out private health insurance prior to turning 30?

1 + 2 = 3 marks Total 13 marks