



INSIGHT
Trial Exam Paper

2010

**HEALTH AND HUMAN
DEVELOPMENT**

Written examination

Sample responses

This book presents:

- correct sample responses
- mark allocation details
- tips on how to achieve top results

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Question 1

Table 1: Deaths of Indigenous Persons 2001–2005

Age group (years)	Indigenous death as a proportion of total death (%)		Indigenous Persons as a proportion of total population (%)	
	Males	Females	Males	Females
Less than 1	20.3	17.2	7.7	7.7
1–4	16.2	21.3	7.3	7.5
5–14	13.5	14.5	6.9	6.8
15–24	12.4	15.3	5.1	5.4
25–34	13.8	17.4	4.1	4.4
35–44	15.0	16.6	3.0	3.3
45–54	9.1	10.0	2.1	2.3
55–64	4.6	6.4	1.4	1.6
65 and over	1.2	1.2	0.8	0.9

(ABS • IHW • The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples • 4704 .0 • 2008
ABS data used with permission from the Australian Bureau of Statistics)

- 1a.** Identify the age group which has the highest percentage of Indigenous deaths as a proportion of total deaths in Australia for **males**.

Sample response

The 'Less than 1' age group has the highest proportion of Indigenous deaths for males (20.3%).

1 mark

Mark allocation

- 1 mark allocated for identification of the 'Less than 1' group.

Tip

- *Do not use up time explaining your answer – simply identify the group. It is a good idea to include the relevant statistic (20.3%) as a way of checking your answer and also to make sure that you are referring to the given material correctly.*

- 1b.** There are many differences between the health status of Indigenous and non-Indigenous Australians. From the data provided in Table 1, compare the health status of Indigenous Australians to that of non-Indigenous Australians.

Sample Response

The health status of Indigenous Australians is far worse than that of the non-Indigenous population. As can be seen from the data in Table 1, Indigenous males in the 35–44 age group account for 15% of the total proportion of deaths in Australia, yet this age group only makes up approximately 3% of the population. The proportion of Indigenous deaths decreases rapidly in the ‘65 and over’ age group, most probably due to the fact that as Indigenous life expectancy is currently between 15–20 years less than that for non-Indigenous Australians, a very large proportion of Indigenous deaths would have occurred before the age of 65. The high Indigenous Australian mortality rate before the age of 65 is demonstrated by the very low Indigenous proportion of the total Australian population over 65.

4 marks

Mark allocation

To earn 4 marks for this question, you would have to state that the Indigenous health status is worse than the non-Indigenous health status. To do this, you would have to compare the data from the table to show the disparity between the small proportion of the population that is Indigenous compared with the large number of premature deaths which are Indigenous. You would also need to note that Indigenous life expectancy is lower than non-Indigenous life expectancy, which could be done by drawing attention to the rapid decrease in the Indigenous proportion of the population towards the higher age range. This question calls for a reference to statistics from the table.

Tip

- *You can use data from the table from any age group, as long as this supports your answer.*

- 1c.** Suggest and explain **two** social determinants for health that account for the differences in health status between Indigenous and non-Indigenous populations in Australia.

Sample Response

Reason 1 – Living in rural and remote areas

Explanation – Aboriginal people often live in communities in rural and remote areas, which can lead to reduced access to health services such as doctors and hospitals. This would make Indigenous Australians less likely to seek healthcare, as they may have to travel long distances to access these services. Some medical conditions may therefore go untreated or undetected for longer when compared with the total population.

Question 1 – continued
TURN OVER

Reason 2 – Lack of employment

Explanation – Indigenous Australians experience a higher rate of unemployment due to factors such as lower levels of education and living in rural and remote communities with few jobs available. Lack of income can result in not being able to afford healthy food, adequate housing, or adequate healthcare. This impacts negatively on health and increases the risk of conditions such as obesity, diabetes and communicable diseases.

6 marks

Mark allocation

- One mark is available for each reason, and two marks are available for each explanation. A brief explanation would receive one mark, while an extended explanation would receive two marks.

Tip

- *You could write about access to healthcare, availability of fresh food, or income. Make sure you choose reasons that you can fully explain. Avoid making unsupported judgements or assumptions in your answers.*

Total 11 marks

Question 2

- 2a.** Briefly explain why the Commonwealth Government has included Diabetes Mellitus as a National Health Priority Area.

Sample Response

While Type 1 Diabetes accounts for a small proportion of the total incidence of diabetes, Type 2 Diabetes is a major burden of disease. It is one of the top 10 causes of mortality and has a significant impact on both the individual and the community. There is also a link between Type 2 Diabetes, obesity and cardiovascular disease. With changes to diet and lifestyle, Type 2 Diabetes is largely preventable.

2 marks

Mark allocation

- Students should discuss two of the above points for two marks.

Tip

- *Be careful: the National Health Priority Area is Diabetes Mellitus, which also includes Type 1.*

2b. Outline how a low-GI diet can reduce the risk of developing Type 2 Diabetes Mellitus.

Sample Response

Low-GI (Glycemic Index) diets are often recommended for people with Type 2 Diabetes Mellitus. People with Type 2 Diabetes Mellitus often rely on insulin injections or medication to regulate their blood sugar, as their own bodies do not produce enough insulin or the insulin produced is no longer effective, often due to factors such as being overweight. Insulin is a hormone which promotes the uptake of glucose from the blood to other tissues and inhibits the release of glucose to the blood after a meal. Low-GI diets consist of foods which are high in complex carbohydrates, taking longer to break down in glucose through glycolysis. This reduces the rate at which glucose is released into the bloodstream, which in turn reduces the strain on the body's insulin. In addition, a low-fat diet is also recommended in order to further reduce the risk of Type 2 Diabetes Mellitus.

4 marks

Mark allocation

- To be awarded the four marks, you would firstly need to mention what 'GI' stands for. Another mark would be allocated for describing the role of insulin, and two marks would be allocated for the explanation of the link between insulin, low-GI foods and the risk of developing Type 2 Diabetes Mellitus.

Tips

- Use the term blood glucose as opposed to blood sugar. This question may require some planning first to ensure that you fully explain the links between insulin, GI and Type 2 Diabetes.*
- Note that unlike in question 2a, the question focuses on Type 2 Diabetes Mellitus.*

2c. In the table below, list a direct, indirect and intangible cost for both the individual and the community associated with Type 2 Diabetes Mellitus.

Sample response

	Direct	Indirect	Intangible
Individual	Cost of diabetic medication	Premature death due to complications associated with diabetes	Pain of daily injections; Loss of freedom due to blood glucose monitoring
Community	Increased cost of PBS for medications paid through taxes	Loss of productivity in the workforce due to higher number of days off due to illness	Pain and emotional suffering associated with the premature death of the person with diabetes

6 marks

Mark allocation

- 1 mark is allocated for each box.

Tip

- Ensure that you memorise a few examples of intangible costs for similar questions, as these are often the hardest to identify.*

Question 2 – continued
TURN OVER

- 2d.** Identify and describe **one** health promotion program which could be used to reduce the incidence of Type 2 Diabetes Mellitus.

Sample Response

Program – The National Diabetes Action Program

Description – The National Diabetes Action Program [NDAP] is a nationwide program that aims to increase awareness of the seriousness of Type 2 Diabetes in Australia. In addition to this, NDAP also aims to increase community awareness of potential risk and prevention measures as well as providing support for people with Type 2 Diabetes. NDAP achieves these goals through the *Diabetes Act!on* and *Reduce your waist – reduce your risk* campaigns, along with the National Diabetes Register, which collects and maintains data for a national database.

4 marks

Mark allocation

- One mark is allocated for the identification of the program. The remaining three marks are allocated for the description of the program and how it could reduce the incidence of Type 2 Diabetes.

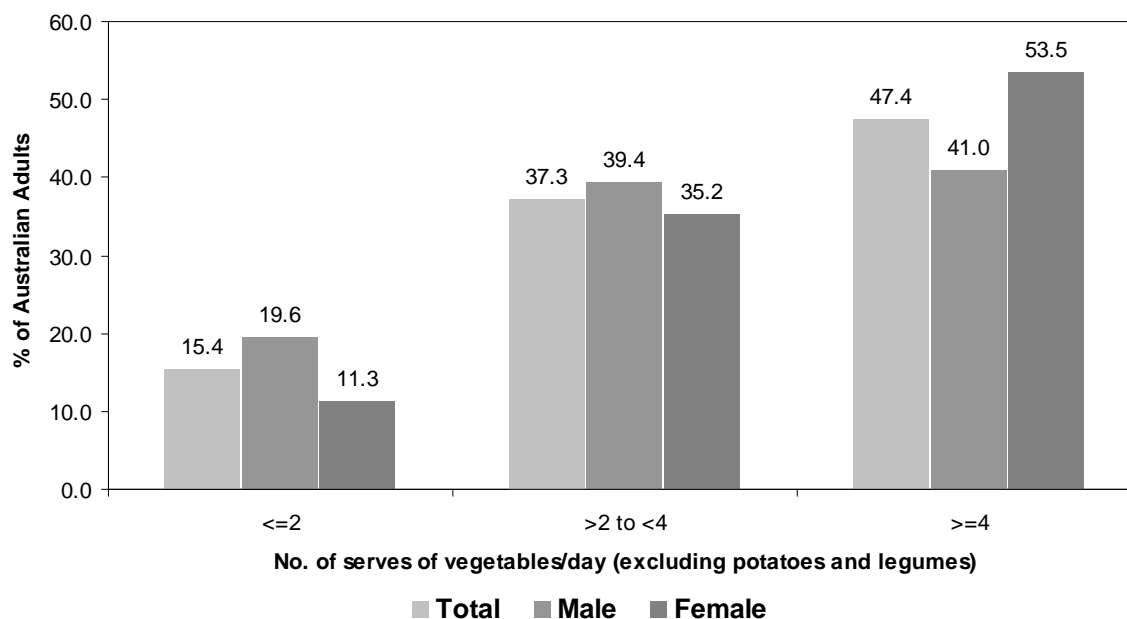
Tip

- *Ensure that you have identified a program rather than an advertising campaign or fundraiser such as the Walk for a Cure initiative, which is not a health promotion program.*

Total 16 marks

Question 3

Graph 1: Distribution of reported vegetable consumption by categories for Australian adults, aged 19 years and over, National Nutrition Survey 1995 food frequency questionnaire.



Source: Australian Food and Nutrition Monitoring Unit (www.health.gov.au)

- 3a.** The Australian Guide to Healthy Eating recommends at least 5 serves of vegetables daily for adults. Using the data from Graph 1, discuss the vegetable intake of Australian adults in relation to the Australian Guide to Healthy Eating.

Sample response

The above graph shows that only 47.4% of Australian adults eat more than 4 serves of vegetables per day, which is below the Australian Guide to Healthy Eating's recommendation of 5 serves per day for adults. The majority of Australians thus do not meet the daily recommendations for vegetable intake.

2 marks

Mark allocation

- 1 mark would be allocated for each point discussed. You could also have discussed the differences between males and females in this respect, after discussing the total population.

Tips

- You may need to add up the relevant figures in this question in order to work out that the majority of adults do not meet the recommendations. This can be deduced by adding the '<2 serves per day' column to the '2–4 serves per day' column.
- Include relevant statistics in your answer, e.g. 15.4% of Australians eat fewer than 2 serves of vegetables per day.
- Do not discuss the impact of this data at this stage. Read ahead to the next few questions to see what may be asked later on. There are only two marks available for this question.

Question 3 - continued
TURN OVER

3b. Identify **two** main nutrients which are found in vegetables.

Sample response

Fibre, folate.

1 mark

Mark allocation

- To earn 1 mark for this question, you could have named any of the following: Carbohydrates, Iodine, Vitamin A, Vitamin C, Iron, Riboflavin.

Tip

- Read ahead to the next question and choose at least one nutrient that you are familiar with to discuss in detail in part c.*

3c. Select **one** of the nutrients identified in part **b**. Discuss the role of this nutrient in reducing the burden of disease in Australia.

Sample response

Nutrient – Fibre

Role of nutrient – Fibre plays an important role in reducing the burden of disease in Australia caused by colo-rectal cancers. Cancers, of which colo-rectal cancers are examples, are one of the top three causes of morbidity in Australia at present. Colo-rectal cancers refer to any cancers in the colon or rectum, both of which are key parts of the digestive system. Fibre adds bulk to faeces and makes them softer, allowing the faeces to move more freely through the digestive system. It is thought that faster excretion of faeces reduces the risk of colo-rectal cancers developing, as cancer agents are prevented from staying in the bowels for extended periods of time. A high fibre intake could reduce the risk of developing colo-rectal cancers, which could in turn reduce the impact of cancers on the burden of disease in Australia. Fibre can also help reduce incidence of cardiovascular disease, obesity and Type 2 Diabetes, as fibre-rich foods often provide a feeling of satiety which can reduce the tendency to snack and overeat.

4 marks

Mark allocation

- 2 marks for discussion of links between the nutrient and the condition, and two marks for discussion of links between the condition and burden of disease in Australia.

Tip

- Try to structure your answer to firstly discuss the condition(s) that the nutrient is associated with, then the impact of the condition(s) on the burden of disease in Australia, then the role that the nutrient plays in reducing this burden.*

- 3d.** Briefly discuss the effectiveness of nutrition surveys as a tool to measure the health status of a population.

Sample response

Nutrition surveys can be a useful tool to measure the food consumption of a large population and provide a guide to their nutrient intake. However, nutrition surveys often rely on self-reported data which is not always accurate and subject to over- or under-reporting by participants.

2 marks

Mark allocation

- To earn the full two marks, you would have to mention the usefulness of nutrition surveys as well as the implications of using self-reported data.

Tip

- Ensure that you discuss both the positives and the negatives of nutrition surveys.*

Total 9 marks

Question 4

Table 2. Comparison of indicators between selected nations, 2007

	Under 5 Mortality Rate (per 1,000), 2007	Life Expectancy at birth (years), 2007	Estimated HIV prevalence rate (%), 2007	Population using improved drinking water (%), 2006	Infants with low birth weight (%), 2007
Australia	9	81	0.2	100	7
Canada	8	81	0.4	100	6
Cambodia	91	59	0.8	65	14
Japan	4	83	-	100	8
Malaysia	11	74	0.5	99	9
Uganda	130	51	5.4	64	14
United Kingdom	6	79	0.2	100	8

- 4a.** List **two** ways of identifying a developing country from the table above.

Sample response

- People in developing countries generally have a lower life expectancy than developed countries.
- People in developing countries often have lower rates of education and literacy than developed countries.

2 marks

Mark allocation

- 1 mark would be allocated for each way of identifying a developing country.

Tip

- There are many more points that could be used for this question, including (but not limited to) the points that developing countries have lower rates of immunisation, higher rates of communicable diseases, higher rates of infant mortality and lower levels of sanitation than developed countries.*

Question 4 – continued
TURN OVER

- 4b.** Select **one** indicator from Table 2 and compare the data related to that indicator for a developed and developing country.

Sample response

Indicator – Under-5 mortality rate per 1,000 births.

Comparison – The under-5 mortality rate is much lower for developed countries such as Australia, Canada and Japan than it is for developing countries such as Cambodia and Uganda. For example, the under-5 mortality rate was 9 infants for every 1,000 born in Australia in 2007, whereas the under-5 mortality rate was 130 infants for every 1,000 born in Uganda in 2007.

3 marks

Mark allocation

- One mark would be awarded for the correct identification of the indicator (including the year of the data is not necessary). Two marks are available for the comparison. You would need to demonstrate your understanding of the unit of measurement for that particular indicator to receive full marks, e.g. percentages, incidence per 1,000 people, life expectancy in years or other relevant units of measurement.

Tips

- *You could discuss any of the indicators in the table. Choose the indicator that you are most familiar with.*
- *Remember to indicate whether your chosen country is developed or developing, e.g. infants with low birth weight – Australia (developed) 7%, Uganda (developing) 14%.*

- 4c.** Describe **two** influences that would account for the differences in the health status for your chosen indicator.

Sample response

Influence 1 – Poverty: developing countries have higher rates of poverty, which prevents people from having access to basic resources such as food, safe water, basic healthcare and education.

Influence 2 – Education: there are often lower rates of education and literacy in developing countries, which can reduce the health knowledge of individuals and their capacity to gain employment and earn money.

4 marks

Mark allocation

- One mark awarded for each influence listed, and one mark for each description as long as the influences relate to the indicator.

Tip

- *Other influences listed could include gender, healthcare, globalisation, conflict or environment.*

- 4d.** Select **one** influence listed in 4c. Describe the impact that the selected influence could have on the health of a person living in a developing country.

Sample response

Poverty can impact negatively on the health of people in developing countries in many ways. Poverty can lead to malnutrition, as lack of income can prevent people from being able to purchase fresh fruits and vegetables. Poverty can also prevent people in developing countries from accessing education, which reduces their health knowledge and can increase the incidence of communicable diseases such as HIV and Hepatitis B.

2 marks

Mark allocation

- Two marks are available, therefore two examples of the impact that the chosen influence has on health are required.

Tip

- *Note that two examples are needed for two marks. Be explicit in your description; show exactly how the influence impacts on health. Ensure that you also identify the aspect of health affected, e.g. social, mental, physical.*

Total 11 marks

Question 5

5a. For each level of Government, list **one** example of a health-related responsibility.

Sample Response

Federal – Management and funding of Medicare.

State – Provision and maintenance of public hospitals.

Local – Ensuring the cleanliness of the food industry in the local council area.

3 marks

Mark allocation

- One mark is allocated for each level of government.

Tip

- *Make sure that you list the examples without wasting time explaining them in detail.*

5b. There are many values that underpin the Australian healthcare system. Select **two** of these values and give examples of how they are evident in the Australian healthcare system.

Sample Response

Value 1 – Accessibility

Example – Medicare has many options for people to claim its benefits depending on their circumstances, e.g. online, in person at a Medicare office or at a medical clinic.

Value 2– Responsiveness

Example – All patients have the right to ask for a male or female doctor if they choose. For example, female patients may request a female doctor to administer a Pap smear.

4 marks

Mark allocation

- One mark is allocated for each value, and one mark is allocated for each example.

Tip

- *Other values could include effectiveness, appropriateness, efficiency, safety, capability or sustainability.*

Total 7 marks

Question 6

Kar Kulture – VicHealth Partnership Program

An innovative new project is helping young people learn about road safety and crossing cultural barriers while working together to restore a second-hand vehicle.

“This project will make it easier for young people to get on with others who seem very different to themselves, including police officers,” says the CEO of the South Eastern Region Migrant Resource Centre, Jenny Semple. “At the same time, they will acquire a better understanding of road safety, and once the car is restored, there is the opportunity to gain valuable driving practice”.

The project brings together Australian-born young people with newly-arrived Australian young people, who come from places as varied as African countries, such as Sudan, as well as Burma and Afghanistan. Many of them are refugees who were forced to flee persecution and find safety in Australia.

“After young people arrive in Australia, they often feel very isolated and it’s difficult for them to make friends in the wider community – especially if they look or sound very different to us,” says Ms Semple. “On the other hand, Australian young people may not fully understand young people from refugee backgrounds, or the reasons why they were forced to flee their home and come here”.

As well as improving interactions between the different groups of young people, the project aims to help young people understand road safety, improve their driving skills and gain their L plates and P plates. Once the car is completely restored, it will be used to provide valuable driving practice to participants who are on their L plates. For those participants who do not yet have their L plates, workshops will be conducted to help them pass the exam, before the car is completed...

...The Kar Kulture project is managed by the South Eastern Region Migrant Resource Centre in partnership with Victoria Police and Mission Australia. Local organisations have supported the project, including Handbrake Turn Dandenong, Chisholm Institute of TAFE and RACV. Handbrake Turn and RACV generously donated a second-hand Holden Commodore and Chisholm have provided a secure garage space for the project”.

(Source: www.vichealth.vic.gov.au)

6a. What is VicHealth?

Sample Response

VicHealth is the Victorian Health Promotion Organisation which is run and funded by the Victorian Government. They aim to promote good health and prevent ill-health in Victoria.

1 mark

Mark allocation

- One mark awarded for an accurate definition.

- 6b.** The *Kar Kulture* project is run partly by VicHealth. Suggest **two** potential positive health outcomes from this project and explain how the outcomes could be achieved by the project.

Sample Response

Health Outcome 1: The participants may experience greater self esteem, and therefore gain improved mental health due to the fact that they are learning new skills in order to complete a major project.

Health Outcome 2: Greater levels of skills and knowledge for the participants in relation to driving, which could result in a lower risk of injury on the road, which would improve physical health. The program educates the participants on road safety and driving.

6 marks

Mark allocation

- One mark awarded for each suggested health outcome, and two marks awarded for each explanation of how the outcomes are linked to the project.

- 6c.** List the **five** action areas of the Ottawa Charter, and provide an example of how VicHealth reflects each of these.

Sample Response

Area 1: Build Healthy Public Policy

Example: VicHealth lobbies governments to do this by supporting organisations such as *Quit* in order to have tobacco laws changed.

Area 2: Create Supportive Environments

Example: The *Kar Kulture* program provides refugees with a socially safe environment to meet people in their local community.

Area 3: Strengthen Community Action

Example: Getting stakeholders such as local community members and local health resources involved.

Area 4: Re-orient Health Services

Example: Creating partnerships with local community members, Victoria Police, VicRoads, the South Eastern Migrant Resource Centre and other key groups in the *Kar Kulture* program.

Area 5: Developing Personal Skills

Example: Participants of the *Kar Kulture* program have their personal skills enhanced by teaching them about road safety and mechanics, which could increase their opportunities for employment.

10 marks

Mark allocation

- Two marks would be awarded for the linking of each of the five action areas of the Ottawa Charter to VicHealth.

Tip

- *The question does not say that you have to use the Kar Kulture program, but it is a good idea to use the resources available to you, especially if you cannot think of another example. Also ensure that you list each of the action areas in your answer. You can do this at the beginning if you wish.*

Total 17 marks

Question 7

- 7a.** List **three** functions of the UN in providing global health and sustainable human development.

Sample response

- i.** Promoting social and economic development.
- ii.** Providing humanitarian relief.
- iii.** Advocating for human rights.

3 marks

Mark allocation

- One mark would be awarded for each function.

Tip

- *The functions could be worded slightly differently and could also include peacekeeping operations.*

- 7b.** Explain the importance of the UN's Millennium Development Goals.

Sample response

The Millennium Development Goals were released in 2001 by the United Nations to demonstrate its commitment to fighting poverty, hunger, disease and inequality globally. The Millennium Development Goals act as a framework to achieve these outcomes. They include quantified targets and indicators, which are divided into eight key goals. The goals represent an important international agreement between developed and developing countries to alleviate extreme poverty by 2015.

3 marks

Mark allocation

Three marks would be allocated for a response that discussed the aims of the Millennium Development Goals and their significance on an international level. Two marks would be awarded for a less detailed response. One mark would be awarded for mentioning that the Millennium Development Goals aim to alleviate extreme poverty by 2015.

Tip

- *This question requires memorisation of the importance of the goals. As it is only worth three marks, try not to go into any further detail than is necessary to answer the question.*

Question 7 – continued
TURN OVER

- 7c.** Select **one** of the UN’s Millennium Development goals and outline a program that could address this goal. Discuss the effectiveness of the initiative in achieving sustainable human development.

Sample response

Selected UN Millennium Goal – Eradicating Extreme Poverty and Hunger

Outline of program – One program that could be used to address this goal is World Vision’s ‘Seeds, Tools, Training’ program. This program assists families in purchasing drought-resistant seeds and tools to grow food, and provides families with the training needed to cultivate the crops. The families are given the initial seeds and tools, and they then sell the food they have grown to buy more seeds and tools.

Effectiveness of program – This program not only provides families with food but also with income. Having a source of food and income allows these families to develop to their full potential, as they are at a lower risk of diseases caused by malnutrition, and enhances their capabilities through the training that is provided. It gives the families access to knowledge about farming methods, as well as a decent standard of living, through increased income and food supply. The program is sustainable, as it is economically affordable for the families: there is no cost to them until they make a profit from the sale of their crops. It is environmentally appropriate, as the crops are drought-resistant and do not require much water. It is also socially equitable, as the whole community can access the program and its benefits.

8 marks

Mark allocation

- One mark would be awarded for the correct naming of a Millennium Development Goal.
- Two marks would be awarded for the description of the program.
- Another three marks would be awarded for linking the program with the chosen Millennium Development Goal and with human development generally.
- Two marks would be awarded for discussing the sustainability of the project.

Tips

- *The program does not have to be real: you can create a program as long as it addresses the Millennium Development Goal you selected and achieves sustainable human development. Make sure you reference the United Nations’ definition of Human Development, for example “developing to their full potential” and “leading a productive life”.*
- *Ensure that you discuss the Dimensions of Sustainable Development (social, economic and environmental). Always support your statements with an example.*
- *Do not discuss health in this question, as it is asking you about sustainable human development.*

- 7d.** List **one** example of each of the following types of aid: emergency aid, bilateral aid, multilateral aid.

Sample response

Emergency aid – sending food to tsunami victims in Sri Lanka

Bilateral aid – the Australian government providing infrastructure to Papua New Guinea to build roadways

Multilateral aid – the Australian government providing money to World Vision to then send on to other countries

3 marks

Mark allocation

- One mark would be allocated for each type of aid listed.

Tip

- *You do not have to list actual examples of aid that AusAID is involved in, as long as they are realistic and correctly exemplify that type of aid, any examples are suitable.*

- 7e.** Outline **two** ways in which the World Health Organisation [WHO] improves global health and/or sustainable human development.

Sample response

1. The World Health Organisation [WHO] provides leadership on critical health matters and engages in partnerships to achieve global health outcomes.
2. WHO monitors the global health situation and assesses health trends.

2 marks

Mark allocation

- One mark would be awarded for each goal outlined.

Tip

- *This question requires you to have memorised the roles from your textbook.*

Total 19 marks

END OF SAMPLE RESPONSES BOOK