



Units 3 and 4 Health and Human Development

Practice Exam Solutions

Stop!

Don't look at these solutions until you have attempted the exam.

Any questions?

Check the Engage website for updated solutions, then email practiceexams@ee.org.au.

Question 1a

A range of responses is acceptable. Students can argue that this is either humanitarian or bilateral aid, or both, as long as they provide adequate reasoning. [1] each for a definition of each term, and [1] for relating it to the case study.

Below is an example of a high-scoring response:

While the Government's original response to the immediate dangers is an example of humanitarian aid, which refers to the rapid assistance given to people in immediate distress to relieve suffering during and after man-made and natural disaster, it is also bilateral aid as Australia directly supports Fiji to rebuild, which is more focused on long-term development and is where aid is given directly by one country to another.

Question 1b

The Government's aid program aims to promote Australia's national interests by contributing to sustainable economic growth and poverty reduction.

Question 1c

A range of responses is acceptable, depending on the priorities chosen.

Below is an example of a high-scoring response:

Education [1]: in this response, Australia has worked to help Fijian children return to school, providing support so they can continue receiving quality education [1].

Economic development, including encouraging trade and private sector development [1]: this response enables farmers and market vendors to return to work, encouraging trade, and focuses on maximizing employment and keeping developing skills through returning people to school [1].

Question 2a

The social model of health is a conceptual framework within which improvements in health and wellbeing are achieved by directing effort towards addressing the social, economic and environmental determinants of health [1].

The model is based on the understanding that in order for health gains to occur, social, economic and environmental determinants must be addressed [1].

Question 2b

A range of responses are acceptable depending on the principle chosen.

Below is an example of a high-scoring response:

Principle selected – empowers individuals and communities [1].

Explanation – empowering individuals and communities with health knowledge and skills means that they are in a position to make positive changes to their health. It also means that they can participate in decision making about their health, which makes them feel empowered and encourages them to make healthier choices in their everyday routine [2].

Question 3

Any three of:

- Universal health coverage
- International health regulations
- Increasing access to medical products
- Social, economic and environmental determinants
- Non-communicable diseases
- Health-related Millennium Development Goals

Question 4a

Any two of:

- Lung cancer
- Melanoma
- Non-melanocytic skin cancer
- Breast cancer
- Cervical cancer
- Prostate cancer
- Colorectal cancer
- Non-Hodgkin's lymphoma

Question 4b

A range of responses are acceptable depending on determinants chosen.

Below is an example of a high-scoring response:

- *Determinant 1: Biological determinant (genetics) [1]. Females are more likely to be diagnosed with breast cancer as, due to their genes, they have more breast tissue than males. Similarly, males are more likely to be diagnosed with prostate cancer, as females do not have a prostate [1].*
- *Determinant 2: Behavioural determinant (tobacco smoking) [1]. There is a higher number of male smokers compared to female smokers. As a result, the risk of lung cancer, throat cancer and other tobacco-related cancers is higher for males [1].*

Question 4c

A range of responses are acceptable depending on types of cost chosen.

Below is an example of a high-scoring response:

- *Direct cost – cost of diagnostic tests (such as MRIs) [1].*
- *Indirect cost – loss of income as the individual will need to take time off work for treatment [1].*
- *Intangible cost – loss of quality of life and leisure time, as the individual will have severe side effects from treatment or be unable to socialise completely if they are admitted into hospital [1].*

Question 5

A range of responses are acceptable depending on the factors chosen. Students must have identified two factors and explain why both of these factors have made it difficult to implement the programs in developing countries.

Below is an example of a high-scoring response:

- *Factor 1: lack of government intervention. The governments in developing countries are unlikely to fund and implement programs that encourage people to quit smoking or educate the population about the health risks of tobacco. This is because governments in developing countries do not have the money and resources to implement such programs or because the governments are more concerned with more immediate health threats to the population, such as malaria and HIV [2].*
- *Factor 2: lack of education and understanding. The proportion of the population that is uneducated in developing countries is much higher than it is in developed countries. This means that many people in developing countries are unable to understand health promotion messages. The resources spent on education programs will be wasted if the target population is unable to understand the messages. As a result, it is often not worthwhile to implement health promotion programs without first implementing programs to increase levels of literacy [2].*

Question 6

A range of responses are acceptable.

Below is an example of a high-scoring response:

Non-government agencies such as Nutrition Australia play a significant role in promoting healthy eating in Australia. To do this, they tend to provide dietary advice, education and necessary information in order to allow individuals to control their own health [1].

Nutrition Australia, for example, offers fact sheets, the services of student centres, and campaigns at local schools in order to promote healthy eating. Nutrition Australia also promotes the 'Healthy Living Pyramid,' which categorises foods into 'eat most,' 'eat moderately' and 'eat in small amounts' categories, making it easier to make good food choices [1].

Question 7a

Under 5 mortality rate - 'The number of deaths of children under five years of age per 1000 live births.' (WHO, 2008) [1].

Question 7b

Sustainability - 'Meeting the needs of the present without compromising the ability of future generations to meet their own needs.' (UN, 1992) [1].

Question 8a

A range of responses is acceptable.

- The United Nations provides emergency relief and necessary supplies, such as food, water, shelter and medical attention, in emergencies [1].
- The United Nations sets up and maintains camps for refugees forced to leave their homes in emergencies [1].

Question 8b

A range of responses is acceptable. Below is an example of a high-scoring response:

Providing necessary supplies such as food, water and medical attention reduces malnutrition, dehydration and the spread of disease in bad conditions [1]. Hence, it may reduce the mortality and morbidity from starvation and communicable diseases such as diarrhea and cholera for populations worldwide [1], enabling people to survive through difficult conditions and promoting equity in health worldwide by improving the health status of disadvantaged countries [1].

Question 9a

The Australian Guide to Healthy Eating (AGHE) is a conceptual framework, devised by the Australian Federal Government, which aims to make clear the relationship between foods and nutrients [1].

The AGHE uses a visual representation of the five food groups, organised in proportion to how much they should be consumed [1].

Question 9b

A range of responses are acceptable. Below is an example of a high-scoring response:

Strength – the AGHE promotes food variety, and clearly shows the recommended proportion of food group intake in an easy-to-understand manner [1].

Weakness – the AGHE does not define serving sizes, and there is some ambiguity as to where particular foods belong (e.g. a fruit tart has aspects of numerous food groups) [1].

Question 10a

The three types of diabetes are:

- Type 1 diabetes mellitus - the condition is characterised by the pancreas not producing enough (if any) insulin, a hormone that is required to metabolise glucose. As insulin is not being produced, it must be administered regularly through insulin injections. The cause of this condition is thought to be genetic [1].
- Type 2 diabetes mellitus - the pancreas does not produce enough insulin or the body becomes insulin resistant and loses its ability to respond to insulin. It is linked with being overweight [1].
- Gestational diabetes - occurs during pregnancy in some women due to the hormone changes that block the action of insulin. The condition usually disappears after giving birth, however it may increase the mother's risk of developing type 2 diabetes in the future [1].

Question 10b

A range of responses are acceptable. Students must identify one social determinant, and one behavioural determinant, and explain how their chosen determinants contribute to Indigenous communities being more at risk of diabetes.

Below is an example of a high-scoring response:

- *Physical environment determinant – access to healthcare [1]*
 - *Indigenous Australians tend to live in rural areas, which means they are more likely to have poor access (as they live further away) to health services than non-Indigenous Australian (who are more likely to live in urban areas). This lack of access results in fewer check-ups and poorer understanding of health risks. Therefore, Indigenous populations are more likely to not be aware of the health risks of diabetes and be at greater risk of developing the condition [1].*
- *Behavioural determinant – poor diet [1]*
 - *Indigenous Australians are more likely to have a poor diet than non-Indigenous Australians. This means their diet is more likely to consist of large amounts of take away or pre-packaged foods. Such foods are high in salt and saturated fats which are risk nutrients for diabetes [1].*

Question 11a

A range of responses are acceptable.

Below is an example of a high-scoring response:

Many developing countries do not have universal healthcare systems as only a very small portion of the country's income is allocated towards healthcare. The lack of a universal healthcare system means that much of the population is unable to access healthcare due to financial barriers. In addition, developing countries have fewer doctors per capita than developed countries, which increases barriers to healthcare as there are very few hospitals and clinics. The lack of access to healthcare leads to low immunisation rates which leads to a higher incidence of preventable diseases, such as malaria, and a lower life expectancy [2]. Lack of access to healthcare also results in a higher number of home births without the presence of a trained professional, which leads to a higher maternal mortality and infant mortality, both of which reduce life expectancy figures [1].

Question 11b

A range of responses are acceptable depending on the disease chosen.

Below is an example of a high-scoring response:

HIV/AIDS: [1] Countries such as Bangladesh and Ethiopia have a high prevalence of HIV whereas countries such as Australia have a very low prevalence of HIV. The difference in prevalence is due to the quality of healthcare in the countries and safe sex practices (which may be influenced by cultural practices). The Australian population is more likely to have safe sex due to the education campaigns that inform the population about the risks of unsafe sex, such as the possible contraction of HIV [1].

Countries such as Bangladesh and Ethiopia, on the other hand, have cultural barriers that may prevent safe sex. This means that a larger portion of their population is at risk of contracting HIV. In addition, the lack of access to low cost healthcare means that people are often unaware that they are HIV positive and spread the disease without being aware of it [1].

Question 12a

The Ottawa Charter defines health promotion as 'the process of enabling people to increase control over, and to improve, their health' [1].

Question 12b

- Mediate - The prerequisites and prospects for health cannot be ensured by the health sector alone. More importantly, health promotion demands coordinated action by all concerned: by governments, by health and other social and economic sectors, by nongovernmental and voluntary organization, by local authorities, by industry, and by the media. Professional and social groups and health personnel have a major responsibility to mediate between differing interests in society for the pursuit of health [2].
- Enable - Health promotion focuses on achieving equity in health. Health promotion action aims at reducing differences in current health status and ensuring equal opportunities and resources to enable all people to achieve their full health potential. This includes a secure foundation in a supportive environment, access to information, life skills and opportunities for making healthy choices [2].
- Advocate - Good health is a major resource for social, economic and personal development, and an important dimension of quality of life. Political, economic, social, cultural, environmental, behavioural and biological factors can all favour health or be harmful to it. Health promotion action aims at making these conditions favourable through advocacy for health [2].

Question 13a

A range of responses are acceptable depending on the responsibilities chosen.

Below is an example of a high-scoring response:

- *Responsibility - maintaining parks and playgrounds [1]*
 - *By maintaining parks and playgrounds, local governments provide an environment that encourages healthy activities such as physical exercise for people of all ages. If parks are clean and well facilitated, people are more likely to use the facilities and go for runs or walks. If playgrounds are safe and regularly monitored, children are more likely to play and increase their physical and social health by playing with other children in the community [1].*
- *Responsibility 2 – rubbish collection [1]*
 - *By ensuring that houses have their rubbish collected regularly, local governments provide a sanitary living environment. Such environments reduce the risk of disease spread and encourage people to get rid of their rubbish regularly so they do not create a breeding ground for bacteria within their homes [1].*

Question 13b

A range of responses are acceptable.

Below is an example of a high-scoring response:

Local governments could implement an educational and support program aimed at individuals above the age of 40 or 45 [1].

The educational section of the program could cover potential falling hazards around the house and how to arrange furniture to minimise the risk of falls. It could also include potential lifestyle changes to decrease the risk of serious injury from falls. The program could provide support for all participants when and if required by providing anti slip mats for showers and bathtubs and helping install grip bars around the houses of the elderly who need them [2].

The program would also encourage participants to help each other out, share what works for them and encourage them to spend more time with each other, which would help improve social and mental health of participants [1].

Question 13c

Students must list two correct nutrients, from phosphorus, calcium and vitamin D.

Below is an example of a high-scoring response:

Calcium [1]

Food source: milk [1]

Calcium strengthens and ossifies bones, helping achieve and maintain peak bone mass to reduce risk of thinning of bones (osteoporosis) [1].

Vitamin D [1]

Food source: salmon [1]

Vitamin D helps absorb dietary calcium and use it in ossifying bones, helping maintain peak bone mass to reduce osteoporosis risk [1].

Question 13d

Students must list two correct values: Effective, efficient, responsive, accessible, safe, continuous, sustainable [2].

A further [2] for an appropriate explanation of each.

Below are some examples of high-scoring responses:

Effective: If more people require medical treatment, waiting lists may increase which reduces the effectiveness of the health system.

Efficient: some treatments required to treat conditions associated with the elderly can be very expensive. This may decrease the ability of the health system to achieve desired outcomes with the cost effective use of resources.

Safe: If the health system is under more pressure as a result of conditions related to the elderly, funds may not be able to be invested as much in maintaining the safety of health care settings.

Question 14a

Clean water and sanitation

Question 14b

Below is an example of a high-scoring response.

This goal aims to achieve equitable and affordable access to safe drinking water and sanitation for all. It aims to improve water quality by reducing pollution from elimination, open defecation and hazardous materials [1]. It also reduces water scarcity by increasing safe reuse of waste water and increasing water use efficiency [1].

Question 14c

A range of responses are acceptable.

Below is an example of a high-scoring response:

WaterAid Australia implements programs in developing countries in an attempt to increase access to clean water and improve sanitation. The program works with the locals, as they understand local issues and the community can be empowered [1].

The program provides locals with the skills and support to build and maintain pumps and wells in close proximity to their homes. These wells not only allow for access to clean water, but also save women time, as the need for travelling to collect water is eliminated. The program also builds public toilets in communities and educates the locals on how to use and maintain the toilets in addition to teaching them other hygienic practises. The introduction of toilets in small village communities reduces the exposure faecal matter that would otherwise be found on the streets [2].

Question 14d

A range of responses are acceptable.

Below is an example of a high-scoring response:

By increasing access to clean and uncontaminated water, this program will reduce the spread of water-borne diseases such as diarrhoea and cholera [1]. When people are free from illness, they are able to work and earn an income to provide for their families, so they can access knowledge, health and a decent standard of living, and lead productive and creative lives [1]. As girls will no longer have to travel far to collect water, they will also be able to attend school and get a decent job, enabling them to develop to their full potential and participate in their community [1].

Question 15

Below is a sample high-scoring answer:

Military action in a war may destroy crops and infrastructure such as wells, also injuring civilians, hence reducing physical health as people are more likely to suffer from malnutrition and diseases such as diarrhea and hookworm, thus increasing mortality and morbidity rates from these diseases and from injury [1]. It may also negatively affect mental health, as people may not be able to cope with the stress of seeing loved ones injured or dying of disease. Being less physically healthy due to malnutrition and disease, people may be less able to attend school and work [1], and are thus less able to develop to their full potential and expand their skills and capabilities, and earn an income that enables them to access knowledge, health and a decent standard of living [1]. As these people have less access to education, health and living standards due to military action and the government spending less money on healthcare and education, they are less likely to be able to pass on education and knowledge to their children in the future (social sustainability) [1]. They may be so focused on meeting their current economic and environmental needs, such as exploiting available land, that they cannot ensure sustainability for future generations [1]. This may in turn limit the potential of future generations to achieve health and lead productive and creative lives in accord with their needs and interests [1].

Question 16a

One of:

- promote healthy eating
- encourage regular physical activity
- prevent tobacco use
- prevent harm from alcohol
- improve mental wellbeing

Question 16b i

A range of responses are acceptable, depending on the priority selected in part a. Below is a sample high-scoring answer:

Encouraging regular physical activity may reduce rates of conditions such as obesity and cardiovascular disease, so people are more likely to be healthy and able to go to work, school, social events and sport/physical activity events [1] where they can be socially healthy by interacting with their friends and participating in their community [1].

Question 16b ii

Below is a sample high-scoring answer:

Encouraging regular physical activity may reduce rates of obesity and related chronic conditions, improving people's body image and self-esteem [1], and also their ability to cope with stress and work productively through producing endorphins [1].