



# 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](mailto:practiceexams@ee.org.au).

## Short-answer questions

Note: Some of the solutions below are only possible examples. In some instances a range of responses is acceptable. Please consult with your teacher or tutor if unsure.

### Question 1a

Biomedical model of health.

### Question 1b

The other model of health is the social model.

The rest of the question could be answered in a number of ways – one possible answer is:

The social model of health is a conceptual framework through which improvements in health and wellbeing are achieved by directing effort towards addressing the social, economic and environmental determinants of health. The model is based on the understanding that in order for health gains to occur, social, economic and environmental determinants must be addressed.

Disadvantages: the social model of health does not address illnesses or conditions once they occur and another disadvantage is that the social model does not encourage advances in technology (whereas the biomedical model of health does).

### Question 2a

The answer should list any four of the following:

- MDG 1: Eradicate extreme poverty and hunger
- MDG 2 : Achieve universal primary education
- MDG 3: Promote gender equality and empower women
- MDG 4: Reduce child mortality
- MDG 5: Improve maternal health
- MDG 6: Combat HIV/AIDS, malaria, and other diseases
- MDG 7: Ensure environmental sustainability
- MDG 8: Develop a global partnership for development

### Question 2b

Many answers are acceptable, one possible answer is:

Improve maternal health – the purpose of this goal is to reduce the number of deaths of women that occur as a result of pregnancy and childbirth and to improve access and provision of reproductive healthcare services. The goal also aims to provide women with appropriate information and care to promote health before, during and after pregnancy.

### Question 3a

'Emergency aid' refers to the rapid assistance given to people or countries in immediate distress to relieve suffering, during and after man-made emergencies such as wars, and natural disasters such as flood(s), tsunami(s) or earth quake(s). The term emergency aid can also be called 'humanitarian aid'.

### Question 3b

Any Asia - Pacific country, for example: Indonesia, China, India, Bangladesh, PNG

**Question 3c**

Many answers are acceptable, one possible answer is:

One reason why Australia would provide aid to countries in the Asia-Pacific region is to improve regional security. By providing emergency aid the countries law and order system can restore faster and there is likely to be less conflict in the future. Another reason is to improve trade. By providing emergency aid Australia can strengthen its relationship with the country the aid is being provided to which is beneficial in making trade agreements.

**Question 4**

Life expectancy is an indication of how long a person can expect live, it is the number of years of life remaining for a person of a particular age if death rates do not change. Health adjusted life expectancy (HALE) on the other hand is a measure of the burden of disease based on life expectancy at birth, but including an adjustment for time spent in poor health. It is the number of years in full health that a person can expect to live, based on current rates of ill health and mortality. HALE is a more comprehensive measure of health status than life expectancy as it can be used as a measure of quality of life. Life expectancy only measures quantity (in terms of length) of life.

**Question 5a**

Medicare is Australia's universal healthcare system. It aims to improve access and provide adequate healthcare to all Australians at little or no cost. Medicare is funded by the federal government which raises these funds through the Medicare levy and surcharge.

**Question 5b**

Many answers are acceptable, one possible answer is:

Advantage: Medicare provides access to healthcare to all Australians regardless of socio-economic status.

Disadvantage: Medicare only covers only certain services. Services such as chiropractic care are not covered.

**Question 6a**

DALY is a measure of burden of disease, one DALY equals one year of healthy life lost due to premature death and time lived with illness, disease or injury.

$DALY = YLD$  (years of life lost due to disability) +  $YLL$  (years of life lost due to premature death)

**Question 6b**

Physical dimension of health relates to the efficient functioning of the body and its systems, and includes the physical capacity to perform tasks and physical fitness. Examples include level of sickness, physical strength and fitness.

**Question 7a**

Any four of:

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

**Question 7b i**

The answer to this question depends upon the four priorities chosen in part a. One possible answer is:

TeamUp. This program addresses the 'encourage regular physical activity' priority area.

**Question 7b ii**

The answer to this question depends upon the answer given in part b i. One possible answer is:

TeamUp is a unique smartphone and Facebook 'physical activity marketplace' app. Created by VicHealth, TeamUp encourages people to connect and take part in any physical activity, when and where they want.

**Question 7b iii**

The answer to this question depends upon the answer given in part b ii. One possible answer is:

Outcome 1 – the TeamUp program improves the physical health of individuals by promoting regular physical activity and movement. This assists to prevent the onset of diseases such as obesity and cardiovascular disease.

Outcome 2 – the program improves the social health of individuals by getting people involved in sports teams and therefore increases their chance of meeting new people and developing relationships.

Outcome 3 – the program improves the mental health of individuals as people tend to feel better about themselves when they exercise, as this often leads to the release of endorphins.

**Question 8a**

The National Health Priority Areas are a collaborative initiative endorsed by the Commonwealth and all State and Territory governments. The NHPA initiative seeks to focus the health sector's attention on diseases or conditions that have a major impact on the health of Australians. The NHPAs represent the disease groups with the largest burden of disease and potential costs (direct, indirect and intangible) to the Australian community.

**Question 8b**

Either Arthritis and Musculoskeletal conditions or Dementia.

**Question 8c**

Many answers are acceptable, one possible answer is:

Reason 1: Arthritis and musculoskeletal conditions / Dementia contribute significantly to burden of disease in Australia.

Reason 2: Arthritis and musculoskeletal conditions / Dementia contribute to significant economic burden in Australia, in terms of their direct, indirect and intangible costs.

**Question 8d**

Many answers are acceptable, one possible answer is:

The Waves Warm Water Wellness Program is run by Arthritis Victoria and aims to improve the quality of life, prevent disability, promote self-management and positive health and fitness for individuals living with arthritis. The program is funded through the public and government donations received by Arthritis Victoria and by the small fees participants of the program are required to pay. The program involves weekly classes in hydrotherapy pools across Victoria for people with arthritis to encourage exercise and self-management of the condition. The program also enables participants to meet people in similar situations to themselves and form healthy and supportive relationships.

**Question 8e**

The answer to this question depends upon the answer given in part d. One possible answer is:

This program is effective as it improves the health of participants in all three dimensions of health and reduces the burden of disease caused by arthritis. It improves the physical health of participants by engaging them in regular exercise, it improves social health by enabling participants to meet and mingle with people like themselves, and lastly it improved mental health as people who are self-sufficient have higher confidence and self-esteem. Although the program does not prevent arthritis, it helps prevent the disability that can be caused by the condition.

**Question 9a**

Mortality strata are a method of classifying UN member states based on their level of child and adult male mortality. It allows countries with similar health outcomes to be grouped together.

**Question 9b**

Australia would most likely be classified in mortality strata A. This is because Australia has very low rates of child mortality and very low adult male mortality.

**Question 9c**

Many answers are acceptable, one possible answer is:

Mortality strata do not give a definite indication as to whether a country is developed or developing. Countries in strata B and C are hard to label as either developed or developing. Further statistics concerning mortality rates are only averages and they do not reflect the large variations that exist within countries (e.g. Australia is in strata A however certain socioeconomic groups in Australia like the Indigenous population have a health status closer to strata B and C countries).

**Question 10a**

A tool developed by the United Nations to measure and rank countries' levels of social and economic development. It provides a single statistic based on three dimensions – health, education and living standards, and four indicators – life expectancy at birth, mean years of schooling, expected years of schooling and gross national income per capita.

**Question 10b**

Many answers are acceptable, one possible answer is:

The index is not a complete measure of development as it does not include important indicators such as gender and income equality and it is difficult to measure indicators (of development) like respect for human rights and political freedoms.

**Question 10c**

Human Development Index (HDI) is based on four indicators, with GDP only being one of the indicators. The HDI of Nepal may be higher because the life expectancy in Nepal is higher than the life expectancy in Afghanistan.

**Question 11a**

Gender equality means that women have the same rights and freedoms as males. In developing countries women are not treated as equals and often given last priority. This leads to lower education levels among females, higher rates of malnutrition and exhaustion in females and fewer opportunities for payed employment. Since women are primary caretakers of children in developing countries, gender equality is important in improving the health of the whole community as healthier mothers tend to have healthier families. If women are educated they are more aware of diseases, such as malaria, and how to prevent them, which leads to lower mortality and morbidity.

Furthermore, gender equality means there are more women focused healthcare centres which may lead to fewer miscarriages, fewer low birth weight babies and a decrease in maternal mortality, which reduces the burden of disease and ensures there are more productive members of the community to participate in economic activities.

**Question 11b**

Any two of the following:

- Develop Personal Skill
- Create Supportive Environments
- Strengthen Community Action
- Reorient Health Services
- Build Healthy Public Policy

**Question 11c**

The answer to this question depends upon the answer given in part b. One possible answer is:

Develop personal skills – gender equality could be improved by equipping women in developing countries with employment and business skills to make money and use this to adequately care for their families. By developing the skills of women, small community groups may form businesses where they may make small exportable goods.

The business would increase household incomes which would mean more and better food for people. Improved nutrition leads to a reduced incidence of malnutrition and increases life expectancy.

**Question 12a**

Any two of:

- National nutrition week
- Healthy living pyramid
- Menu assessment (for schools and public organisations)

**Question 12b**

Nutrition Australia can analyse the results of the survey and create a new healthy living pyramid which emphasises the food groups which Australians are most lacking in.

Nutrition Australia could analyse the results and identify ages or population groups that are not receiving adequate nutritional intake and target these groups with a health promotion campaign.

**Question 12c**

Many answers are acceptable, such as:

- The pyramid does not indicate serving sizes
- The pyramid does not make provisions for composite foods

**Question 13a**

Many answers are acceptable, two possible social determinants are:

Indigenous Australians have higher unemployment rates than non-Indigenous which means they tend to have lower family income. This reduces access to nutrition foods and healthcare services which may reduce life expectancy

Indigenous Australians tend to have lower levels of food security than non-Indigenous Australians. Therefore they are more likely to eat highly processed foods that are high in fat and sodium, contributing to conditions such as cardiovascular disease. This leads to increased levels of premature death and lower life expectancy.

**Question 13b**

Many answers are acceptable, one possible answer is:

Indigenous Australians have a higher prevalence of diabetes mellitus compared to non-Indigenous Australians.

**Question 13c**

Many answers are acceptable, one possible answer is:

The Australian Government could implement an education and exercise program into Indigenous communities to help reduce the incidence of diabetes and help people with diabetes manage the condition. The program could work with Indigenous elders to make it more culturally acceptable. The educational component of the program could involve holding weekly or fortnightly sessions where participants would learn how to cook healthy and nutritious foods which are low in saturated fats so prevent the onset of diabetes. The exercise component of the program could aim to get families engaging in moderate exercise together. This could be group walks/jogs or even dance lessons.

**Question 13d**

The answer to this question depends upon the answer given in part c. One possible answer is:

The three elements of sustainability are appropriateness, affordability and equity. The program is likely to be sustainable as it meets all three elements. The program is appropriate because it addresses the specific needs of the targeted community. Indigenous populations are at a higher risk of diabetes and the program aims to reduce this risk and bridge the gap between the health status of Indigenous and non-Indigenous Australians.

The program is affordable as it is at no cost to participants. The community can get involved in the program at no cost to themselves as the entire program is funded by the Australian government. The affordability of the program also makes it more accessible and attractive as people from low socio economic are able to participate and gain the skills that will help them improve their health.

The program is equitable as it addresses the need of all people within the targeted community. The program aims to equip all members of the community with essential health related skills, and empowers women and people with low education levels by doing so.

**Question 14a**

One of:

- Economic development, including encouraging trade and private sector investment
- Health, including supporting the fight against HIV/AIDS, malaria and tuberculosis
- Education
- Empowering women and girls
- Effective governance
- Humanitarian aid

**Question 14b**

Many answers are acceptable, one possible answer is:

The Australian Government's aid programs may partner with rural communities in Indonesia assisting them to establish local crops. By providing community members with resources such as seeds, soil and tools, these crops could be established. Further to this, the Australian Government could provide training to ensure that community members are aware of how to manage crops throughout the year to ensure maximum yield and minimal plant loss.

**Question 14c**

The answer to this question depends upon the answer given in part b. One possible answer is:

Health: When the crops produce food for consumption, this will promote the functioning of individual's body systems and be a source of fuel for energy production, therefore promoting physical health.

Human development: Teaching community members to grow crops is providing them with access to knowledge and enhancing their capabilities, thus increasing their ability to achieve their full potential.

Sustainability: As the community is taught to maintain the crops, they should be able to bear food for future generations to enjoy. The knowledge learnt regarding its maintenance can be passed on to future generations of the community.

Interrelationships: Maintaining physical health through eating the crop's food provides community members with energy and physical ability to work in the crops. Working in the crops is enhancing individual's skills and this information can then be passed onto others and demonstrates sustainability.