VCE Health and Human Development

Unit 4 – Outcome 1: School Assessed Coursework

Task 1: Test Solutions

Please note that these answers are a guide only and do not represent every possible correct answer.

Question 1 (3 marks)

a. Students need to identify two aspects of the human development definition for a total of two marks.
"Creating an environment in which people can develop to their full potential and lead productive, creative lives according to their needs and interests (1 Mark). It is about expanding people’s choices and enhancing their capabilities (1 Mark), having access to knowledge, health and a decent standard of living (1 Mark), and participating in the life of their community and decisions affecting their lives (1 Mark)."

b. Students receive one mark for defining sustainability.
“Meeting the needs of the present without compromising the ability of future generations to meet their own need’. (1 Mark)

Question 2 (3 marks)

a. Students receive two marks for explaining the WHO Mortality strata.
The WHO mortality strata establishes countries into 5 quintiles (A – E) (1 Mark), based on adult mortality (Male 15-59) and child mortality (U5MR) (1 Mark).

b. Students should demonstrate an understanding of mortality strata D classification for Chad for one mark.
Chad has High child mortality and High adult mortality
Question 3 (16 marks)

a. Students must describe the health status of Australia compared to two developing countries. Two statements using data comparing Australia with two different countries is required for full marks.
Potential responses include:
- **Australia’s health status is higher than Niger.** For example, Australia’s U5MR is 5/1000 live births which is significantly lower than Niger’s which is at 114/1000 live births (1 Mark). Australia’s maternal mortality rates are 7/100,000 people, which is significantly lower than Niger’s 590/100,000 population (1 Mark).
- **Australia’s health status is much higher than South Africa.** For example, Australia’s life expectancy at 82 years is significantly higher than South Africa’s at 57 (1 Mark). Australia’s U5MR is 5/1000, which is lower than South Africa’s 45/1000 population (1 Mark).

b. Students are awarded one mark for their explanation of the human development index and three marks for explaining how the HDI is calculated.
The Human Development Index (HDI) is a single statistic or index that is used to measure the social and economic development of a country. It measures a country’s average achievements in three basic aspects of human development: living a long and healthy life, knowledge and standard of living. The HDI is calculated using the three dimensions listed above. The long and healthy life dimension uses data on life expectancy at birth; the knowledge dimension now uses data relating to the mean years of schooling for adults aged 25 years and expected years of schooling for children of school age and decent standard of living uses data on gross national income per capita or per person.

c. Students are awarded one mark for correctly identifying Australia’s level of human development and one mark for correctly identifying South Africa’s level of human development.
Australia: Very high human development
South Africa: Medium human development

d. To be awarded one mark students must be able to interpret the pattern in the data that relates to GNI and HDI, and a second mark for using data to further explain the trend.
A sample response might be:
The higher the GNI, the higher the HDI (1 Mark). For example Australia has a GNI of $41045 per capita and a HDI level of .933, whilst Niger has the lowest GNI from the table at $869 per capita as well as the lowest HDI of .337 (1 Mark).
e. To be awarded four marks students must be able to link how access to antenatal care impacts the life expectancy of Australia and Niger.

A sample response might be:

In Australia, people have great access to antenatal care prior to, during and post pregnancy period (98% of pregnancies) (1 Mark). As a result, there is a reduced risk of pregnancy complications and maternal mortality. Australians also have access to many doctors so when they are feeling ill and can be effectively treated. These factors allow Australia to have a high life expectancy at 82 years (1 Mark). In Niger, people have less access to skilled health personnel (46% of pregnancies) and so have a higher risk of pregnancy complications and increased maternal mortality (1 Mark). As people are less likely to be effectively treated, Niger has a much lower life expectancy than Australia, at 49 years (1 Mark).

**Question 4 (4 marks)**

a. Students receive two marks for outlining how peace and political instability may influence the health status of Syria.

Below are a series of appropriate responses:

- Political instability can lead to conflict, which means that land can become unavailable for food production. This contributes to malnutrition and high levels of infant and under 5 mortality rates.
- Conflict arising from political instability can lead to the destruction of infrastructure such as wells and water supplies, roads and health care facilities. This increases the risk of diseases such as diarrhoea and infectious diseases.
- Money invested in defense forces rather than health services – if access to health services is reduced, there is likely to be increased morbidity in the population, thus decreasing the overall health status and life expectancy of the population.

b. Students receive two marks for outlining another factor (peace/political stability) that may influence the human development of people who live in conflict affected regions.

Below is a sample response.

Gender inequality: in countries such as Syria, women and girls don’t receive equal opportunities compared to the male population. Many girls are not afforded the same educational opportunities as their male siblings and they will be married off at a young age to relieve the financial burden they are considered to be upon the family. Missing out on primary education as girls, means that as women they have limited employment options and may not receive the opportunity to live a long and healthy life to their full potential.
Question 5 (4 marks)

Students must identify one similarity and one difference in relation to health status indicators between Australia and a developing country. Data must be used for full marks.

Potential responses include:

Similarities:
- 25% of Australia’s 20 years + population is obese which is very similar to Swaziland who has 23% of their 20 years + population who are obese
- Australia’s female adult mortality rate at 46/1000 is lower than Australia’s male adult mortality rate at 80/1000. The same trend is apparent in Botswana, Malawi and Swaziland where the female mortality rates are all lower than the adult male mortality rate.

Differences:
- Australia’s male adult mortality rate at 80/1000 is much lower than Botswana’s adult mortality rate of 301/1000
- Australia’s female adult mortality rate at 46/1000 is much lower than Malawi’s adult mortality rate of 347/1000

Question 6 (4 marks)

a. Students receive two marks for explaining global marketing.
The following are examples of possible responses.
- Advertising, marketing and selling goods around the world.
- Boundaries between countries are reduced/eliminated, allowing individuals, groups and companies to act globally.
- Global marketing allows an increase in technology, allowing it easier to communicate, trade and transport goods around the globe.

b. Students receive two marks for explaining how the global marketing of tobacco and/or alcohol in developing countries could have contributed to 70% of the world’s cancer deaths.
Examples of possible answers are listed below.

Alcohol Use: The global marketing and selling of alcohol has a negative impact especially on developing countries. Developing countries usually sell alcohol at low prices and are less likely to be educated on the risks of alcohol and thus drink to hazardous levels. In developed countries individuals are more likely to be educated and have knowledge of the risks of alcohol and therefore would drink sensibly.
Tobacco use: in developing countries the government may not have implemented any taxes, health promotion campaigns and laws about smoking in public places which may encourage people of developing countries to take up smoking, especially minors which may increase the morbidity and cancer mortality rates. Compared to developed countries, which implement plain packaging and plenty of health warnings to deter people from taking up smoking.

**Question 7 (4 marks)**

Students receive one mark for correctly identifying a factor and a second mark for explaining how the factor contributes to low and middle income countries experiencing higher rates of NCD compared to high-income countries. Two factors need to be identified and explained for a total of four marks. Students should mention both groups of countries (i.e. low- and middle-income and high-income countries) for full marks. Examples include:

- **Lack of access to health care:** Those in low- and middle-income countries may not have access to health care so they may not get the treatment or the advice they need to manage and help with NCD’s such as diabetes or heart complaints, and may die as a result. Compared to those in high-income countries where health care and advice from health professionals is often more accessible.

- **Lower levels of education:** those in low- and middle-income countries may not have the same level of education about how to prevent the onset of NCD’s that those in high-income countries do. This may contribute to poor diets and poor lifestyles lived and as a result contribute to higher mortality rates compared to high-income countries.

- **Low income:** low incomes may result in people not being able to afford healthy nutritious foods, and consume energy dense diets, hence increase their risk of suffering from NCD’s such as type two diabetes and CVD compared to people of high income countries. Income could be a significant factor as to why low - middle-income countries experience higher NCD mortality rates compared to high-income countries.
Question 8 (4 marks)

Students receive one mark for correctly identifying Australia and a second mark for making reference to life expectancy and GNI compared to the other countries. No marks are awarded for making reference to the infant mortality rate.

*Highest*: Australia - has the highest life expectancy of 82 and the highest GNI of 41045, which is significantly higher than the other countries.

Students receive one mark for correctly identifying Pakistan and a second mark for making reference to life expectancy and GNI compared to the other countries. No marks are awarded for making reference to the infant mortality rates

*Lowest*: Pakistan has the lowest life expectancy of 66 and a very low GNI of 4651, which would produce a lower HDI.

Question 9 (8 marks)

a. Students receive one mark for correctly identifying each element of sustainable programs and a second mark for linking each to the case study. For example:

** Appropriateness:

• This program is appropriate as 347 million people have diabetes worldwide, 90% being type 2 which is largely causes by poor lifestyle
• Prevalence of obesity especially in young people has risen significantly in Senegal, which increases the risk of them suffering from type 2 diabetes
• 4-6% people have diabetes in Senegal

** Affordability:

• The program is affordable as the text messages are free.

** Equity:

• The program is equitable as it is exploring how it can assist the poor and vulnerable.

b. Students must link the program to one aspect of health and one aspect of human development for four marks.

For example:
Health:

- By providing access to health information via a text message, the program may assist in decreasing prevalence of diabetes as well as assisting the managing of diabetes during Ramadan, hence improving the physical health.
- By having access to diabetes information, diabetic sufferers may experience reduced stress levels, enhancing mental health.

Human Development:

- Fewer mothers will die as a result of the program. This means that they will be able to continue to provide for their family. This assists all family members to lead long, healthy and productive lives in accordance with their needs and interests.
- More babies will survive as a result of the program. Having lower mortality rates among children will mean that they are more able to reach their potential and lead long, healthy lives that they value.