

**Instructions**

Answer **all** questions in the spaces provided.

**Question 1** (6 marks)

Health and wellbeing consists of a number of dimensions, including spiritual and mental.

- a. Describe **spiritual health and wellbeing**. 2 marks

spiritual health and wellbeing refers to the values, beliefs and ideas that arise in the conscience of humans. additionally spiritual health relates to a person having a guiding sense of purpose and meaning within their lives.

- b. An aspect of mental health and wellbeing is **levels of stress**. Use this example to show **how mental and spiritual health and wellbeing are interrelated**. 2 marks

an individual who is feeling optimistic and happy may prioritise time for socialising with friends instead of sitting alone at home. being social can make a person feel good about themselves by having ~~issues~~ people with whom to discuss issues. therefore, having a close network of friends allows people to share ~~iss~~ problems affecting themselves such as body image, ~~reducing~~ which reduces stress levels and anxiety from overthinking.

- c. **Briefly explain** the importance of optimal health and wellbeing as a resource for countries. 2 marks

populations with optimal levels of health and wellbeing experience greater economic benefits such as higher average incomes, greater productivity, reduced healthcare, and associated caring costs. social benefits of optimal health and wellbeing for countries include improved life expectancy and

(see page 15)

**Question 2 (7 marks)**

The Australian Government plays a key role in working towards the Sustainable Development Goals in low-income countries.

a. Identify the objectives of the SDGs.

3 marks

- to end extreme poverty
- to fight inequality and injustice
- to address climate change

b. Identify two priorities of Australia's aid program and explain how each may assist in achieving an objective of the SDGs (use a different objective for each response).

4 marks

• gender equality and empowering women and girls – advocating for an increase in income for women, increasing safety for women at work and educating them to allow them to work in higher quality jobs that aren't a detriment to their health and wellbeing, and equipping women ~~and~~ with skills and train them to become leaders in parliament demonstrates the objective of the SDGs in fighting inequality and ~~+~~ injustice.

• education and health – contributing funds and teachers to develop better schools for children; <sup>in low-income countries</sup> for adults, general skills ~~training~~ training, and basic

(see page 15)

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**Question 3** (14 marks)**Source 1**

Oral diseases relate to diseases of the mouth and include oral infection and sores, periodontal (gum) disease, tooth decay, tooth loss, and other diseases and disorders that limit an individual's capacity in biting, chewing, smiling and speaking.

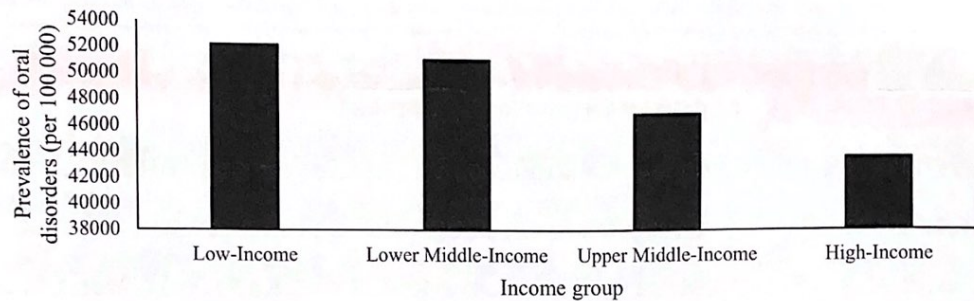
**Source 2**

- Even though most oral diseases are preventable, almost everyone is likely to be affected during their lifetime.
- In low and middle-income countries, but also in a number of high-income countries, the treatment of oral diseases remains unaffordable or inaccessible for large segments of society.

Source: Oral Health Worldwide, FDI World Dental Federation, 2015.

**Source 3**

The following graph shows the prevalence (per 100 000) of oral disorders for the four income groupings in 2016.



Source: Adapted from Global Burden of Disease Study 2016.

**Source 4**

The following graphic shows ways to prevent oral diseases disease.



Source: ada.org.au, 2018.

**Source 5**

According to the Australian Institute of Health and Welfare (2016), the prevalence of oral diseases and untreated oral diseases are higher among certain population groups in Australia including Indigenous Australians, those living outside of Australia's major cities and those from lower socioeconomic backgrounds.

**QUESTION 3** – continued

- a. Selecting evidence from the sources presented and using your own knowledge, explain reasons for similarities and / or differences in health status due to oral diseases within and between countries, and discuss opportunities for health promotion to reduce the prevalence and impact of oral diseases in low- and high-income countries.

12 marks

oral diseases are a <sup>major</sup> issue globally in regards to dental care. according to source 1, oral diseases 'limit an individual's capacity' in relation to actions involving your mouth. this shows that the affect of such diseases can prohibit an individual when eating and speaking, while experiencing excessive physical pain and discomfort. although almost all oral diseases are preventable, most individuals throughout their life may experience such disorders, having either a minimal or substantial affect caused from an inconvenience. source 2 overlooks the importance of the cost of dental care worldwide. this accurately shows that although individuals <sup>may</sup> suffer from dental diseases, the cost of treatment is either 'unaffordable or inaccessible'. those living in high-income countries may have expensive fees when accessing dental care, the public health system in australia is free to all australians, however, medicare does not include dental care which is <sup>otherwise</sup> unaffordable as the cost of treatment is more than some individuals income. those living in low-income countries may already experience a poorer health status than those in middle-income countries, the access to resources in both low- and middle-income countries may be decreased from the location and cost of treatments. source 3 provides a good overview of the prevalence of oral diseases for the four income groupings evident in 2016. those in low- and lower middle-income groups may have greater exposure to processed foods and low levels of education, <sup>as demonstrated</sup> with a prevalence of oral diseases between 51-52000 per 100000, however, by having knowledge of health literacy promotes the decrease in dental disease, whereas those in upper middle- and high-income earning individuals may already have the appropriate knowledge in regard to 'unhealthy' foods that influence dental disorders, evident with a prevalence between 43-47000 per 100000 cases. source 4 is useful in <sup>the</sup> understanding of a manageable oral care routine that may prevent oral diseases. the use of an infographic represents the key message in an effective manner in reducing the prevalence of dental diseases. governments in low- and middle-income countries could use infographics for their population to assist in health literacy

(see page 15)

QUESTION 3 – continued

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- b. Outline two **limitations of the biomedical model** in relation to **dental health**. 2 marks

• it relies on health professionals and technology which may be costly - smaller, rural-based health clinics may not be able to afford medical technology and resources,  
 therefore, if children have fillings in teeth, they may not be able to be filled and protected from holes  
 • not every condition can be treated - some population groups may not be able  
 (see page 15)

**Question 4** (6 marks)

Life expectancy and health-adjusted life expectancy (HALE) are common measures of health status.

- a. Briefly explain the **difference between life expectancy and HALE** as measures of health status. 2 mark

life expectancy relates to the number of years a person can expect to live (quantity of life), whereas health-adjusted life expectancy refers to the number of years a person can expect to live in good health (quality of life).

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- b. Outline two ways that **Medicare has contributed to improvements in life expectancy over time**. 4 marks

• medicare provides many essential health treatments and medications when necessary, allowing health concerns to be managed or treated, and therefore contributes to lower rates of morbidity and mortality, and may increase life expectancy.  
 • medicare makes surgery more affordable as fees for public hospitals are bulk-billed. this means that lifesaving surgeries are more ~~aff~~ accessible and life expectancy increases as a result.

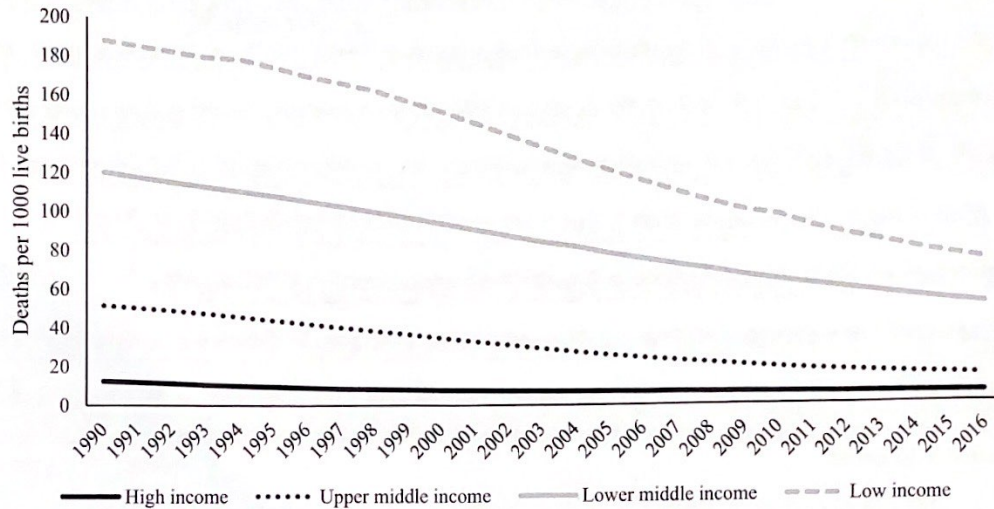
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**Question 5 (11 marks)**

The following graphs shows the under 5 mortality rate (U5MR) over time according to World Bank income groups.



Source: World Bank data, 2018.

- a. Using data, compare the **U5MR for low- and high-income countries over time.** 3 marks
- the under-five mortality rate is lower in both high- and upper middle income countries than lower- middle and lower income countries between 1990 and 2016. in 1990, 190 deaths per 1000 <sup>live</sup> births was evident in low-income countries than those in upper middle-income and high-income countries highlighting less than 50 deaths per 1000 <sup>live</sup> births respectively. fortunately in 2016 the U5MR in both low- and lower- middle-income countries had decreased to between 60 to 80 (see page 15)
- b. Outline two aspects of old public health and explain how each could assist in reducing the U5MR in low-income countries. 4 marks
- the establishment of better sanitation and water - communities in low-income countries are more likely to have a lack of access to safe water while also suffering from the lack of sanitation systems, with clean water to drink provided to low-income countries, contributes to a reduction of deaths of children under five years from water-borne diseases such as cholera, decreasing years of life lost and U5MR in communities.
  - improved working conditions - those in low-income countries <sup>may</sup> suffer from preventable disasters that result in death, with a reduction in industrial - related child deaths and a reasonable standard of living. this <sup>may</sup> reduce poverty-related illness and contribute to a reduction in injuries, reducing the under-five mortality rate.

QUESTION 5 – continued

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- c. Identify two WHO prerequisites for health and explain how each could contribute to improved USMR in low-income countries. 4 marks

• peace - the absence of conflict reduces the risk of premature death, injury and disability that commonly arises from conflict, and the absence <sup>of war enables</sup> of children to attend school. This assists communities in low-income countries as children are in a healthy environment while being invested in education and spending time with family, improving their quality of life and the <sup>country</sup> USMR.

• food - access to reliable food supply promotes optimal functioning of the body systems, prevents children to experience malnutrition, and allows greater energy to lead productive lives free from illness. Children under the age of five years who have adequate nutrition, strengthens their immune system which is required to fight off pathogens and prevent illness, improving the under-five mortality rate in low-income countries.

Question 6 (8 marks)

High body mass index contributes significantly to burden of disease in Australia.

- a. Explain what is meant by high body mass index. 1 mark

high body mass index refers to a weight that is above the healthy range, classified as 25 and above.

- b. Explain how the PBS may assist in promoting equity for those experiencing a condition associated with high body mass index. 3 marks

the pharmaceutical benefits scheme subsidises the cost of many medications listed on the PBS list, demonstrating equity by the availability that all Australians have access to. High body mass index conditions such as type 2 diabetes are able to be treated by medications, those needing <sup>these required</sup> medications are supported by the PBS safety net which gives extra financial assistance, especially <sup>focusing</sup> on disadvantaged population groups.

QUESTION 6 – continued

- c. Outline two ways that the WHO works and discuss how each may contribute to reducing the impact of high body mass index globally. 4 marks

- provide technical support and help build sustainable health systems - the world health organisation provides tailored advice to different countries in ways that would work best for them. this ensures that countries are given the most suitable guidance to work towards health-related goals such as the intake of sugar, and therefore, global health and wellbeing, reducing the high body mass index globally.
- monitor health and wellbeing and assess health and wellbeing trends - by ensuring that the health-related progress in reducing high body mass index globally, creates a consistent effect within different countries by determining what should be included in assisting individuals to avoid the impact of conditions caused from a high body mass index.

Question 7 (6 marks)

Climate change and world trade are global trends predicted to have significant impacts on health and wellbeing.

- a. Explain one way that climate change can impact mental health and wellbeing. 2 marks

climate change demonstrates an increase in the earth's average surface temperature. individuals may be living in fear of extreme weather events caused by climate change, increasing anxiety and making it difficult to cope with day to day commutes.

- b. Explain one positive impact and one negative impact on health and wellbeing related to world trade. 4 marks

- world trade allows low- and middle-income countries to sell goods that they have a competitive advantage in internationally. this may develop stronger health care systems and education systems to improve the population's health and wellbeing.
- when high-income countries are participating in a trade with businesses from lower-income countries that may not have the same level of negotiation skills or business expertise, businesses from higher-income countries can exploit the other side to enable them to trade at a lower price, and those in lower-income countries may not be educated enough to know what they are being exploited, compromising the population's health and wellbeing.

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**Question 8** (16 marks)

- Studies – lots of them – have shown that education is one of the **best** investments to make for children who live in poverty. And educating girls, specifically, creates ripples of change for generations to come.
- Only 43% of secondary-school-aged girls are in school in low-income countries.
- 1 out of 5 girls in low-income countries does not complete sixth grade.
- More than 10 000 girls a day will get married before they turn 15. But girls with secondary schooling are 6 times less likely to marry before they turn 18.
- A woman who earns an income reinvests 90% of it into her family. A man typically spends 30-40% of his income on his family.
- 1 year of schooling increases a girl's individual earning power by 10-20%.
- HIV and AIDS rates are reduced by 50% among youth who have completed primary education.
- 700 000 HIV cases could be prevented each year if all children received a primary education.
- A girl in a low-income country who receives 7 years of education
  - marries 4 years later
  - has 2 fewer children

Source: Adapted from <https://blog.compassion.com/female-literacy-educating-girls-poverty/>

- a. Using the information above and your own knowledge, explain how the education of girls can assist in achieving the Sustainable Development Goals. 9 marks

the education that girls receive increases literacy skills required for employment and enables them to make informed life choices to improve their living standards and health.

'1 out of 5 girls in low-income countries does not complete sixth grade', if this rate is reduced, then further girls are able to receive education that assists them in their future career when having an increased income compared to those who haven't received education.

this can decrease the poverty cycle for people living on less than US\$1,90 per day, assisting the achievement of sustainable development goal (SDG) 1, no poverty. girls who are educated are able to earn a decent income in their future which can be spent on her family, therefore, there is more money to be spent on resources such as clean water and adequate food, improving the achievement of SDG 6, clean water and sanitation, and SDG 2, no poverty. the reduction of the rate in female teenage pregnancies may be evident if there is a decrease of 'girls getting married before they turn fifteen', this can mean that girls are able to have children later in life, instead of experiencing issues such as severe complications while giving birth, especially at a young age.

educating girls may reduce the number of issues that can occur, as they will have the knowledge of the importance of their future, this can mean that the education of girls decreases maternal mortality in low- and/or middle-income countries, while also promoting the achievement of sustainable development goal 3, good health and wellbeing.

**QUESTION 8** – continued

b. Identify a type of aid and justify its use in promoting the education of girls.

3 marks

bilateral aid can be used from one government and given to another, high-income countries ensure that the education received by a low-income country is able to assist children in their future when they have a career, this meets the 'specific' needs of the country receiving assistance when educating girls.

c. Describe two ways that individuals can take social action and explain how each may promote the education of girls in low-income countries.

4 marks

- donations - donating money to non-government organisations is a great way to act as these organisations will use these funds in a way that will benefit low-income countries. providing funds may help develop the education of girls <sup>by</sup> ~~with~~ teaching skills and knowledge that will assist them in making decisions and <sup>no</sup> ~~poverty~~ in the future.
- support fairtrade - supporting fairtrade involves buying products that are fair trade approved and supporting the working conditions of those making the products we buy and use. this is demonstrated when educated girls are able to receive education instead of having to take care of their family and experience child labour.

### Question 9 (3 marks)

Sustainability is a key consideration in promoting health and wellbeing globally.

Explain what is meant by economic sustainability and discuss its role in promoting health and wellbeing in a global context.

economic sustainability refers to ensuring that average incomes in all countries are adequate to sustain a decent standard of living and continue to rise in line with inflation and living costs in the future. economic sustainability promotes the government to use resources and managing funds to ensure services and infrastructure are provided for future generations. to help ensure economic sustainability for both current and future generations there are several considerations which are important such as the innovation and diversity of industries, employment, economic growth, and trade.

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**Question 10** (11 marks)

The following table shows mortality rates (per 100 000) for Indigenous and non-Indigenous males and females in 2012:

Indigenous		Non-Indigenous	
Males	Females	Males	Females
1117.4	868.6	661.4	508.9

Source: AIHW data, 2017.

- a. What is meant by 'mortality'?

1 mark

mortality refers to the number of deaths in a given period or area, or from a particular cause in a population.

- b. Using data, draw a conclusion about the health status of Indigenous Australians compared to non-Indigenous Australians.

2 marks

indigenous australians have a higher mortality rates than non-indigenous australians. indigenous males have greater mortality rates at 1117.4 deaths per 100000 compared to non-indigenous males with 661.4 deaths per 100000. non-indigenous females have a lower mortality rate at 508.9 deaths per 100000 than indigenous females with 868.6 deaths per 100000 in 2012.

- c. Explain how two sociocultural factors contribute to the difference in health status as identified in part. a.

4 marks

• lack of health literacy - indigenous australians may be unaware of the risk factors of many diseases, therefore, they may be more likely to consume alcohol excessively, misuse drugs, and increasing the risk of cancers and cardiovascular diseases, which contributes to higher mortality rates than non-indigenous australians.

• gender stereotypes - males are less likely to express themselves emotionally as the perception of their mental health may be a weakness, which can increase levels of anxiety or depression. therefore, males are less likely to access health care, increasing the rates of undiagnosed chronic illnesses and mortality rates compared to females, who would get assistance as soon as they think something is wrong.

**QUESTION 10** – continued

d. Making reference to **two action areas of the Ottawa Charter**, describe how **a program** has **promoted Indigenous health and wellbeing in Australia**. 4 marks

- creating supportive environments - in Adelaide a community-based diabetes group developed for indigenous Australians, participants were made to feel comfortable, sharing understandings about diabetes, and helping other group members.
- developing personal skills - education was used to give the indigenous people knowledge and skills to empower them to manage their own health and diabetes, a visual poster was used to help families understand diabetes, and were encouraged to ask questions to gain greater knowledge, learning to measure blood glucose levels is important for assisting them to manage their health.

**Question 11** (6 marks)

'The **marketing of processed foods** has the potential to have a **greater impact in low- and middle-income countries compared to Australia**'. To what extent do you agree with this statement?

although processed foods may have potential implications for health and wellbeing for all low-, middle, and high-income countries, the most significant implication will probably occur in both low- and middle-income countries. low-income countries are often the most susceptible due to having lower average incomes, this means that governments do not have the funds to implement actions to increase nutritional education and introducing healthy eating promotion strategies, this can contribute to higher levels of cardiovascular diseases and obesity in low-income countries, impacting physical health and wellbeing. high-income countries such as Australia have more funds to implement food labelling legislation and healthy eating programmes, this provides manufacturers in these countries to sell their brands of processed foods in low- and middle-income countries, and tend to make a lot of sales in these countries, those in low- and middle-income countries are more likely to consume more processed foods, as these people are often not educated on the negative effects of consumption, leading to increased prevalence of cardiovascular diseases, this can mean that the over-consumption of processed food may potentially lead to type two diabetes and obesity, increasing years of life lost due to disability, whereas those in Australia are educated and aware of the risk of consuming processed foods, this can mean that processed foods marketed in low- and middle-income countries are exposed to the risks which can contribute to poorer health and wellbeing than those in high- **TURN OVER** income countries such as Australia.

**Question 12** (6 marks)

The following case study relates to a Tippy Tap program in Tanzania, a low-income country in Africa.

Even though primary students like Juliana learned about good sanitation and hygiene in class, they had few opportunities to practise their skills because of a lack of basic hand-washing facilities in their community.

“Having knowledge without practice led to many pupils at our school facing contamination, which then led to diseases,” explained Juliana.

But thanks to a World Vision water, sanitation and hygiene project in Busangi, Juliana and her schoolmates can now wash their hands properly following the introduction of simple “tippy tap” technology.

The tippy tap is a “hands-free”, low cost hand-washing device made from a plastic bottle that allows community members to wash their hands hygienically. Once tippy taps were introduced at Juliana’s school, children’s health and hygiene improved considerably.

Due to the success of tippy taps in Busangi’s schools, the technology is now being rolled out across the entire community – ensuring children are better protected from disease.

Parents are learning how to make and use tippy taps in their homes.

At Juliana’s school and others, each class takes it in turns to supply water to fill the tippy tap facility under the supervision of the school health club.

Source: <https://www.worldvision.com.au/media-centre/publications> accessed 2018.

Evaluate the effectiveness of the tippy tap program in promoting health and wellbeing and human development in Tanzania.

the tippy tap program enables primary school students in Tanzania to develop to their full potential, by demonstrating the skills of good sanitation and hygiene which prevents children from ammiting diseases. this means that they are able to adequately grow up and live up to the fullest potential that they are able to have. living a productive and creative life may also be highlighted from children having the access to knowledge that will improve ~~enr~~ their ~~health~~ development and hygiene. the program also allows these primary students to increase their skills and ~~improve their~~ basic hand-washing, improving the knowledge on how to use or teach these facilities to others, which promotes social health and wellbeing by being able to have ~~a supporti~~ effective communication with others. by having ~~ne~~ lower levels of contamination at schools, decreases ~~the~~ diseases that may be introduced if hand-washing was not demonstrated. this can mean that primary school children and their families are able to live with the freedom from illness and have a well-functioning body, systems and organs which promotes physical health and wellbeing. overall the increase of hand-washing

END OF QUESTION AND ANSWER BOOK

(see page 15)

### Extra space for responses

Clearly number all responses in this space.

question 1c) other health outcomes, reduced levels of stress in the community, and less strain on the health system.

question 2b) health care training increases children's knowledge, which assists them in the future when finding a career and therefore are able to receive an average income (more than US \$1.90 per day), highlighting an end to extreme poverty.

question 3b) to readily access dentists, therefore, conditions such as oral cancer or gum disease may not be able to get treated due to access of dentists or no cure.

question 5a) deaths per 1000 live births, also evident within the decrease of under-five mortality in upper-middle and high-income countries.

question 12) decreases the risk of obtaining diseases that may arise when not being hygienic, <sup>and</sup> therefore, promotes health and wellbeing and human development for both primary school students and their families.

question 2a) <sup>it</sup> ~~and~~ <sup>also</sup> is a way to increase the health promotion of dental disorders and how to prevent them. according to source 5, oral diseases are higher among certain population groups in Australia. those living in rural <sup>and remote</sup> areas may have a lack of access to fresh food due to where they live, this may also be the case for lower socioeconomic backgrounds and indigenous Australians, as the food available may only be processed foods and drinks high in sugar. those who are indigenous Australians may have low rates of employment or lack job security, <sup>and</sup> therefore, only able to purchase processed foods. the access to dental care may prevent indigenous Australians and those of lower socioeconomic backgrounds as there may be cultural barriers, influencing the holdback when accessing treatment for oral diseases.