

**Victorian Certificate of
Education 2021**

SUPERVISOR TO ATTACH PROCESSING LABEL HERE

STUDENT NUMBER Letter

**HEALTH AND HUMAN
DEVELOPMENT** Written examination of
previous exams 2004-2020

Tuesday 9 November 2021
Reading time: 2.45 pm to 3.00 pm (15 minutes)
Writing time: 3.00 pm to 5.00 pm (2 hours)

QUESTION AND ANSWER BOOK

Structure of book

<i>Number of questions</i>	<i>Number of questions to be answered</i>	<i>Number of marks</i>
106	106	

- This booklet provides all relevant questions from the end of year exams ranging from 2004-2019
- All questions are relevant to the 2018-2023 study design with a lot of data analysis/models of health in the early part of the book as all information not in the study design has been removed.
- Each question has been colour-coded with the Area of Study it aligns to.

- Unit 3 Area of Study 1
- Unit 3 Area of Study 2
- Unit 4 Area of Study 1
- Unit 4 Area of Study 2

Students are NOT permitted to bring mobile phones and/or any other unauthorised electronic devices into the examination room.

Question 1

a. Injuries, both intentional and unintentional, are a major contributor to the overall burden of disease in Australia.

Figure 1 shows the percentage of overall DALYs (Disability Adjusted Life Years) which are the result of intentional injuries, unintentional injuries, and other causes of illness and death for the range of age groups.

Figure 1. Percentage distribution of DALYs by age group, Injuries, Australia, 1996

Contribution to DALYs	0–14 years	15–34 years	35–54 years	55–74 years
Unintentional injuries	10.5	14.9	6.9	2.2
Intentional injuries	0.7	8.6	4.8	0.8
Other than injuries	88.8	76.5	88.3	97.0
Total DALYs	100	100	100	100

Source: Adapted from Mathers C., Vos, T., Stevenson, C., 1999, The burden of disease and injury in Australia, Australian Institute of Health and Welfare, Canberra, p. 69

Choose **two age groups** listed in Figure 1 and **describe** two differences in percentages of injuries between the two groups you have chosen.

Groups chosen _____

Difference 1 _____

Difference 2 _____

1 + 1 = 2 marks

Question 2

Cancer is one of the National Health Priority Areas (NHPA) in Australia.

- a. Table 1 shows the contribution of cancer and other NHPAs to the burden of disease.

Table 1. Indicators of the impact of NHPA diseases and conditions (various years)

	Prevalence	Disability	Deaths	Burden of disease
NHPA	% of population	% with disability	% all deaths	% total DALY
Cardiovascular problems	16.8	8.6	37.6	21.9
Cancers	1.4	1.7	28.1	19.1
Mental disorders	9.6	14.7	2.4	13.3
Injury and poisoning	11.9	6.8	5.8	8.4
Diabetes	2.9	1.8	2.5	4.9
Asthma	11.6	4.7	0.3	2.6
Arthritis	32.0	34.4	0.8	3.6

Adapted from: Australian Institute of Health and Welfare 2004. Australia's health 2004. Canberra: AIHW. p. 389

- i.** Explain Disability Adjusted Life Years (DALY).

2 marks

- ii.** Describe two differences in the way cancer and arthritis contribute to the burden of disease as shown in Table 1.

1.

2.

2 marks

- c. The Ottawa Charter outlines five priority areas for the practice of health promotion. Choose **one** area and explain how a focus on this area could make an impact on the burden of disease from cancer.

Priority area _____

3 marks

Total 7 marks

Question 3

- a. As part of the 2001 National Health Survey, older Australians living in private households were asked to assess their own health status. The table below details the findings showing the percentage at each age level and how they rate their health.

Table 2. Self-assessed health status of older Australians

Self-assessed health status	Males (%)			Females (%)		
	65–74	75–84	85+	65–74	75–84	85+
Excellent	11.0	8.5	6.5	13.4	7.6	6.5
Good/very good	57.6	52.0	65.7	58.2	54.3	53.2
Poor/fair	31.4	39.5	27.8	28.4	38.1	40.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Adapted from: Australian Institute of Health and Welfare 2004. Australia’s health 2004. Canberra: AIHW. p. 359

- i. Describe **two** differences in how older Australians have assessed their own health status as shown in Table 2 above.

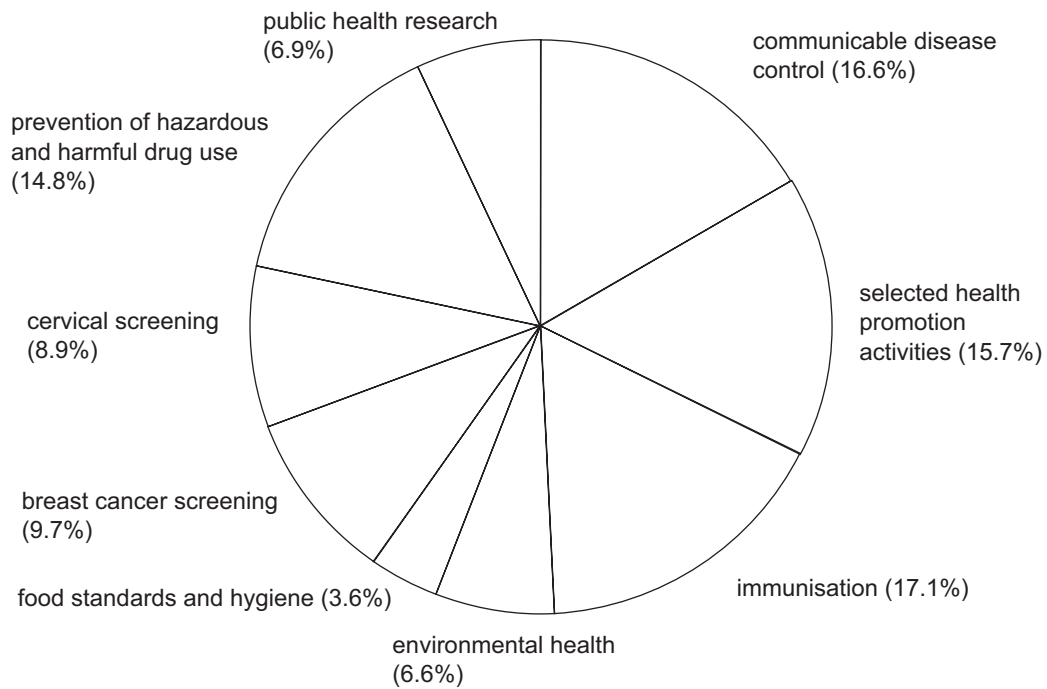
Difference 1 _____

Difference 2 _____

2 marks

- b. State and territory health departments spent \$690.7 million on public health activities in 2000–01. Figure 1 shows the expenditure on public health by activity in 2000–01.

Figure 1. The expenditure on public health by activity in 2000–01



Source: Australian Institute of Health and Welfare 2004. Australia's health 2004. Canberra: AIHW. p. 239

- i. Identify **two** areas of expenditure in Figure 1 that represent a biomedical approach to health.

1. _____
2. _____

2 marks

Question 4

In 2001 the estimated Indigenous population in Victoria was 27 928. This is 0.6% of Victoria’s overall population and 6.1% of Australia’s Indigenous population. The estimated residential population of Indigenous Victorians is distributed evenly between metropolitan and country regions. The health status of Indigenous Victorians varies from non-Indigenous people in Victoria; for example

- life expectancy for Indigenous people is 17 years shorter than for the non-Indigenous population
- Indigenous people in Victoria are hospitalised more frequently than non-Indigenous people
- alcohol and substance-use related disease is 2.0–7.7 times more frequent in the Indigenous population
- cardiovascular disease, including stroke and rheumatic disease, is 1.4–5.0 times more frequent in Indigenous people
- chronic lung disease, including emphysema, is 1.9–25.7 times more frequent in Indigenous people.

Source: adapted from Koori Health in Victoria, Koori Health www.health.vic.gov.au accessed February 2006

a. i. List four important characteristics of the social model of health.

1. _____

2. _____

3. _____

4. _____

ii. Explain how socioeconomic status may impact on the variations in health status between Indigenous and non-Indigenous Victorians as listed above.

Question 5**Table 3.** Disease burden attributable to overweight/obesity by condition, Victoria, 2001

Condition	Deaths	DALYs	% of total DALYs
Type 2 diabetes	1 190	23 479	3.6
Ischaemic heart disease	1 255	113 579	2.1
Osteoarthritis	5	3 130	0.4
Colo-rectal cancer	217	3 130	0.5
Hypertension	146	1 301	0.5
Ischaemic stroke	124	5 255	0.8
Total burden	2 937	149 874	7.9

Source: Adapted from Department of Human Services 2005, *Victorian Burden of Disease Study, Mortality and Morbidity in 2001*, Public Health Group, Rural and Regional Health and Aged Care Services Division, Victorian Government Department of Human Services, Melbourne, p. 87

- a. i.** Explain the term DALY.

- ii.** Outline **one** reason why there is a large difference in **deaths** between osteoarthritis and colo-rectal cancer, while the DALYs for these two conditions are the same.

2 + 2 = 4 marks

d. The Australian Government has developed dietary guidelines across the lifespan, partly in an attempt to reduce the risks associated with obesity.

i. Choose **two** of the Dietary Guidelines for Adults and show how they may assist an individual to maintain a healthy **body mass index**.

Dietary guideline 1

Assistance in maintaining a healthy body mass index

Dietary guideline 2

Assistance in maintaining a healthy body mass index

ii. Describe why the Dietary Guidelines for Adults may not be a complete success in assisting an individual to make effective changes to their food intake.

6 + 4 = 10 marks

Total 14 marks

Question 6

Table 2 below shows the Disability-Adjusted Life Years (DALYs) by age, sex and cause in Victoria 2001.

Table 2

Broad Disease Group	Males by age group years (years)					Females by age group (years)				
	0–14	15–34	35–54	55–74	75+	0–14	15–34	35–54	55–74	75+
Cancer	592	1 581	11 849	38 954	18 165	373	2 098	15 660	28 248	17 632
Diabetes	175	496	5 450	7 017	2 177	169	381	4 180	5 818	3 320
Mental disorders	4 408	25 421	12 665	3 429	467	2 477	23 376	17 074	4 570	530
Cardiovascular disease	121	1 488	9 869	26 332	22 579	220	1 188	4 567	16 821	31 868
Musculoskeletal diseases	63	592	2 613	3 648	1 239	66	724	3 555	5 335	2 814
Injuries	2 138	14 479	8 830	3 209	1 050	1 207	4 172	3 340	1 793	1 690
Other	21 575	9 056	16 641	33 024	27 017	16 869	13 450	15 115	25 638	38 393
Total	29 072	53 113	67 917	115 613	72 694	21 381	45 389	63 491	88 223	96 247

Source: Adapted from Public Health Group, Rural and Regional Health and Aged Care Services Division, 2005, Victorian Burden of Disease Study, Mortality and morbidity in 2001, Victorian Government Department of Human Services, Melbourne, p. 177

a. i. Which disease group contributes **most** to the DALYs for the 15–34 year age group for males **and** females?

ii. Is this disease group likely to contribute more to DALYs through years of life lost to premature death (YLL), or healthy years lost due to disability (YLD)? Explain why.

1 + 3 = 4 marks

- b. i.** Variations in health status result from biomedical factors, lifestyle and behaviour, environmental factors, attitudes and beliefs, and genetic contribution.
Define 'health status'.

- ii.** Using the data in Table 2, what conclusions can you make about the health status of Victorian males compared to Victorian females? Use examples from Table 2 to support your conclusions.

- iii.** Choose **two** of the factors stated in **part b.ii.** and describe how they may cause variations in health status between males and females.

Name of factor 1

How it may cause a variation in health status between males and females

Name of factor 2

How it may cause a variation in health status between males and females

1 + 3 + (2 + 2) = 8 marks

Total 12 marks

Question 7

The Social Model of Health recognised that despite improvements in health over the previous century, there were many people who were still not healthy. It recognised that improvements in health were best achieved by addressing the underlying social and environmental determinants of health.

a. Identify two principles on which the Social Model of Health is based.

- 1. _____

- 2. _____

2 marks

The Ottawa Charter for Health Promotion was developed from the Social Model of Health. It recognises there are a number of prerequisites for health to be met for good health to be achieved.

In Adelaide a community based Diabetes group was developed to encourage Indigenous people to manage their own health. Patients who came to the Community Health Service were invited to fortnightly lunchtime programs with their families. They helped prepare a healthy meal and were able to talk about diabetes related issues. A visual poster was used to help indigenous families to understand diabetes, the importance of eating a healthy diet and measuring blood glucose levels. Participants were encouraged to ask questions and discuss complications associated with diabetes. Transport was provided to and from the lunchtime meetings. The group gained in confidence with each meeting. By the end participants felt comfortable sharing understandings about diabetes and helping other group members to manage their diabetes.

Source: Adapted from <http://www.healthinonet.ecu.edu.au/>. Accessed 22 March 2007

The Ottawa Charter for Health Promotion identifies five priority action areas or elements for health promotion to improve the health of populations.

b. Name two priority action areas and describe how these are evident in the Indigenous Diabetes initiative.

Priority action area 1 _____

Example from the health initiative

- _____
- _____
- _____
- _____
- _____

Priority action area 2 _____

Example from the health initiative

3 + 3 = 6 marks

Total 8 marks

Question 8

Sudan is a low-income country in the North East of Africa in the African World Health Organization (WHO) Region. Australia is a high-income country in the Western Pacific Region of the WHO.

Table 3. Selected health statistical indicators for Sudan and Australia

Indicator	Sudan	Australia
Life Expectancy at birth (years) for females	60.0	83.0
Healthy Life Expectancy at birth (years) for females	49.9	74.3
Child mortality for females (per 1000)	84	5
Adult mortality (per 1000) females	304	50
Total health expenditure as a % of Gross Domestic Product (GDP)	4.3%	9.5%
Literacy rate for females	34.6%	Not available

Source: Adapted from World Health Organization, 'Countries'.

www.who.org/countries. Accessed March 2007

a. List **two** major differences between Sudan and Australia evident in Table 3 above.

1. _____

2. _____

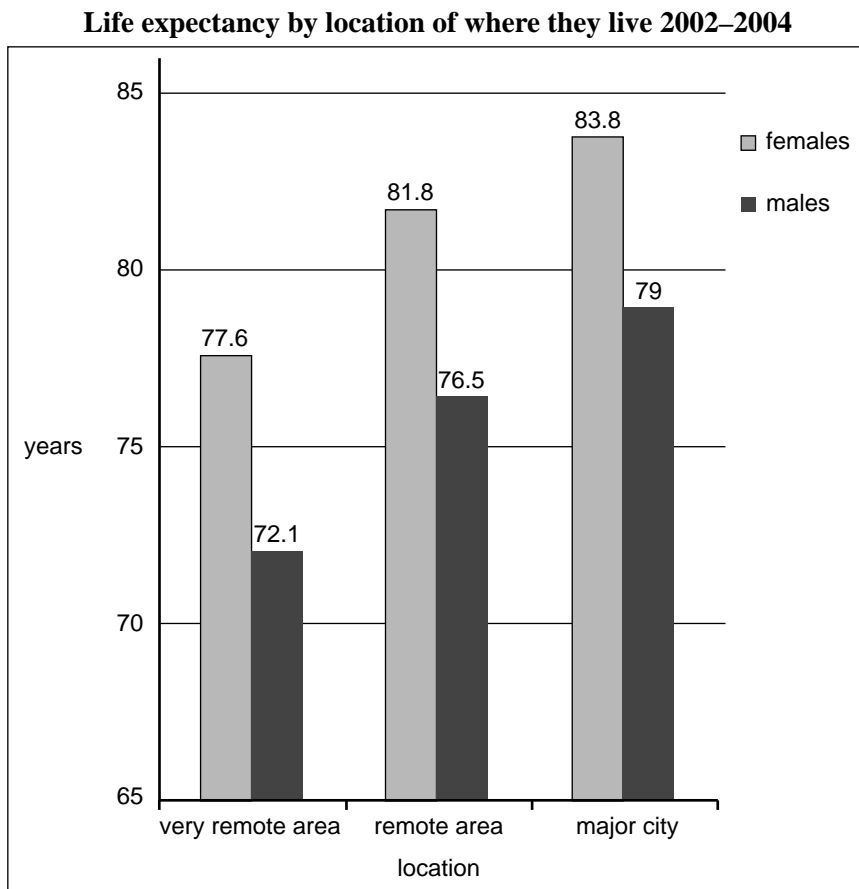
1 + 1 = 2 marks

b. What is the difference between Life Expectancy and Healthy Life Expectancy?

2 marks

Question 9

The following graph compares the life expectancy of males and females according to the remoteness of where they live.



Source: Adapted from the Australian Institute of Health and Welfare, Rural, regional and remote health 2008, p. 52

a. Define the term life expectancy.

1 mark

b. Use the information in the graph above to compare the life expectancy of males and females according to where they live.

Female

Male

2 marks

Marco has been advised by his parents to take out private health insurance before his 30th birthday.

c. i. What is private health insurance?

ii. Why would Marco be advised to take out private health insurance prior to turning 30?

1 + 2 = 3 marks

Question 10

Australian life expectancy at different ages: 1901–1910 and 2003–2005 for males

	1901–1910	2003–2005
From birth	55.2 years	78.5 years
From 30 years	66.5 years	79.7 years

Source: Adapted from Australian Institute of Health and Welfare, *Australia's Health* 2008 p. 27

a. Explain life expectancy.

1 mark

b. Explain two reasons why life expectancy has increased since 1901.

Reason 1

Reason 2

2 + 2 = 4 marks

Question 11

Approaches to health care have changed over time in response to the changes in the types of diseases prevalent in the community.

a. Briefly describe biomedical and the social model approaches to health care.

Biomedical approach

Social Model approach

2 + 2 = 4 marks

b. List two examples that represent a biomedical approach to health.

1.

2.

2 marks

c. Identify two advantages of the Social Model of health.

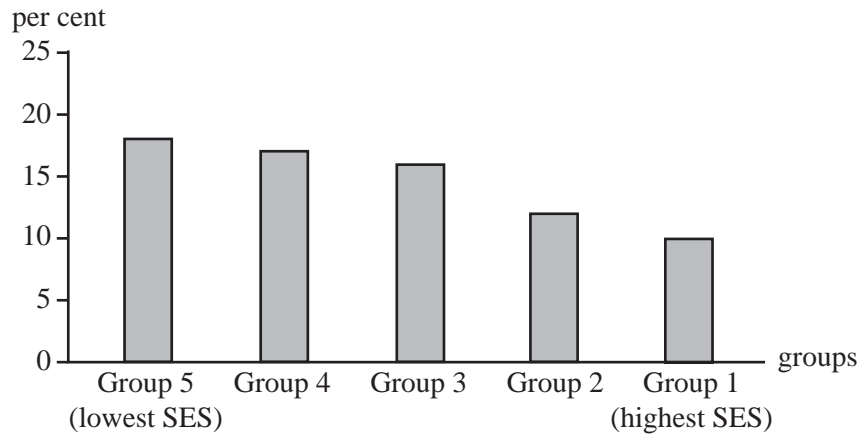
1.

2.

2 marks

Question 12

The graph below shows the prevalence of obesity of females according to socioeconomic status (SES).



Source: Adapted from Australian Institute of Health and Welfare, *Australia's Health 2008*

a. Describe the relationship between socioeconomic status and obesity in females shown in the graph.

1 mark

Question 13

Briefly outline two indicators that are used to measure the health status of populations.

1.

2.

4 marks

Question 14

Explain how Medicare may influence the health status of Australians.

Question 15

Identify and then explain one dimension of health and wellbeing.

2 marks

Question 16

Outline two major characteristics of the biomedical model of health.

1.

2.

2 marks

Question 17

The following information is about the program LEAD (Localities Embracing and Accepting Diversity).

Greater Shepparton City Council has been awarded this program by the Victorian Health Promotion Foundation (VicHealth) aimed at improving community acceptance of cultural diversity. The VicHealth Chief Executive Officer said that communities that support cultural diversity have been found to have better health outcomes.

The focus is on the community as a whole, not just on people from migrant, refugee and Aboriginal communities affected directly by discrimination or racism.

The responses will include a range of different approaches such as communications, community development, and supporting organisations with training and other resources.

Working across settings such as education, employment, and sport and recreation, the LEAD program plans to support local organisations to

- ensure that environments are safe and welcoming for people from a range of cultural backgrounds
- increase understanding and empathy among different community groups
- ensure fairer outcomes for all.

A goal is to identify what works when it comes to reducing discrimination and promoting diversity at the local level.

Adapted from: www.vichealth.vic.gov.au

a. Describe two principles of the social model of health and explain how they are evident in this program.

1. _____

2. _____

6 marks

Question 18

The table below shows the Human Development Index for five high-income countries.

Country	Human Development Index
Australia	0.937
USA	0.902
United Kingdom	0.849
Sweden	0.885
Japan	0.884

Source: Human Development Index, United Nations. Accessed February 2011

- a.** Explain Human Development Index.

2 marks

- b.** Using one of the countries in the table above, explain the relationship between a high Human Development Index and the level of human development.

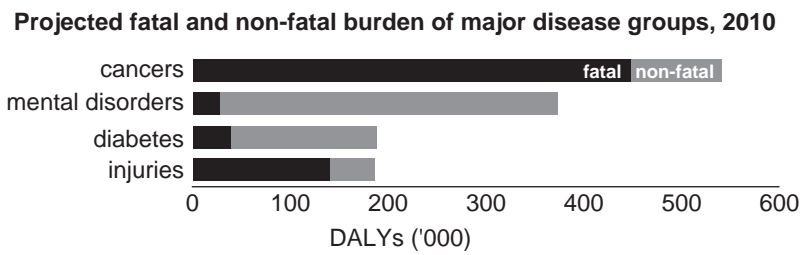
2 marks

2 marks

Question 19

A measure known as the burden of disease shows the impact of different health problems.

The graph below shows the projected fatal and non-fatal burden of some major disease groups in Australia.



Source: Australian Institute of Health and Welfare, Australia's health 2010

Explain burden of disease and use an example from the graph to illustrate its meaning.

3 marks

Question 20

Health status varies within population groups in Australia. The graph below shows premature death rates for the 15–64 year age group according to socioeconomic status (SES).



Source: Australian Institute of Health and Welfare, Australia’s health 2010

a. Identify two factors that contribute to socioeconomic status.

1. _____
2. _____

2 marks

b. From the data in the graph, describe a conclusion that can be drawn about the relationship between socioeconomic status and rates of premature death.

2 marks

c. i. Name one socio-cultural factor (other than socioeconomic status).

ii. Explain how this factor may impact on the rates of premature death for the lowest socioeconomic population group in Australia.

1 + 2 = 3 marks

Question 21

In low income countries the leading cause of death is pneumonia, followed by heart disease, diarrhoea, HIV/AIDS and stroke. In high income countries the leading cause of death is heart disease, followed by stroke, lung cancer, pneumonia and asthma.

Briefly explain how income may influence differences in the causes of death between low income and high income countries.

Question 22

2 marks

Explain the following terms .

Under 5 mortality rate

Morbidity

Question 23

Indigenous males and females in Australia have significantly poorer health than their non-Indigenous counterparts. For example

- the estimated life expectancy for Indigenous males is approximately 12 years less than that of non-Indigenous males
- the estimated life expectancy for Indigenous females is approximately 10 years less than that of non-Indigenous females
- the Indigenous rates for diabetes mellitus are six times higher than non-Indigenous Australians
- Indigenous rates of hospitalisations and mortality are around twice the rate of non-Indigenous Australians
- per person expenditure on health for Indigenous Australians was almost \$6000 per person in 2006–2007, while for non-Indigenous Australians the spending was approximately \$4500 per person.

Source: Australia’s health 2010

a. Explain how one socio-cultural factor of health may impact on the variations in health status between Indigenous and non-Indigenous Australians.

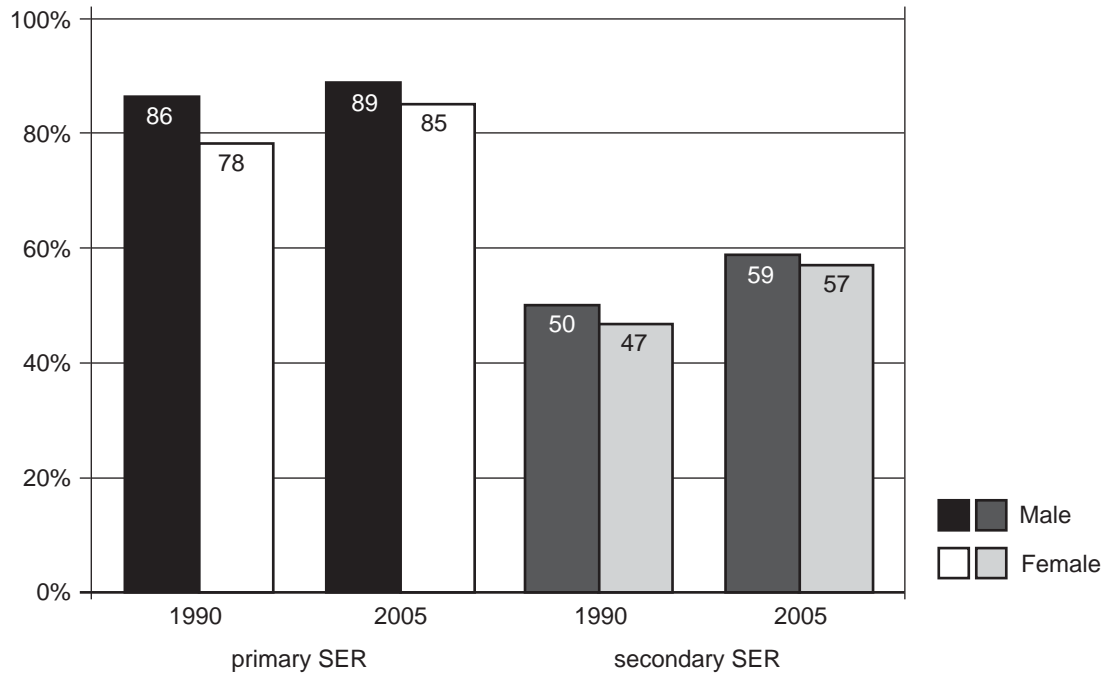
2 marks

b. Use two other examples of factors to explain why Indigenous Australians have significantly poorer health status than non-Indigenous Australians.

4 marks

Question 24

The graph below compares the primary and secondary school enrolment ratios (SER) of boys and girls in developing countries in 1990 to that of 2005.



Source: www.unicef.org

a. Identify one similarity evident in the graph.

1 mark

b. Identify one difference evident in the graph.

1 mark

Question 25

The Ottawa Charter for Health Promotion is an approach to health promotion that reflects the social model of health. It identifies three strategies as well as five priority areas that are important for promoting health.

The three strategies are

- enabling
- mediating
- advocacy.

a. Outline how health promotion is defined in the Ottawa Charter.

2 marks

b. Select two of the three strategies listed above and explain how each of these is important for health promotion.

1. _____

2. _____

4 marks

Question 26

Describe the mental dimension of health and wellbeing.

2 marks

Question 27

The Australian Government is responsible for administering the Pharmaceutical Benefits Scheme (PBS).

a. What is the PBS?

2 marks

b. Explain how the PBS may improve the health status of Australians.

2 marks

Question 28

In 2011, the Australian Institute of Health and Welfare released a report called ‘The health of Australia’s males’. It reported that one in six Australian males did not use Medicare services in 2008–2009. This number is lower than that for females.

a. Explain how Medicare is funded.

2 marks

b. List two health services males might use that could be claimed through Medicare.

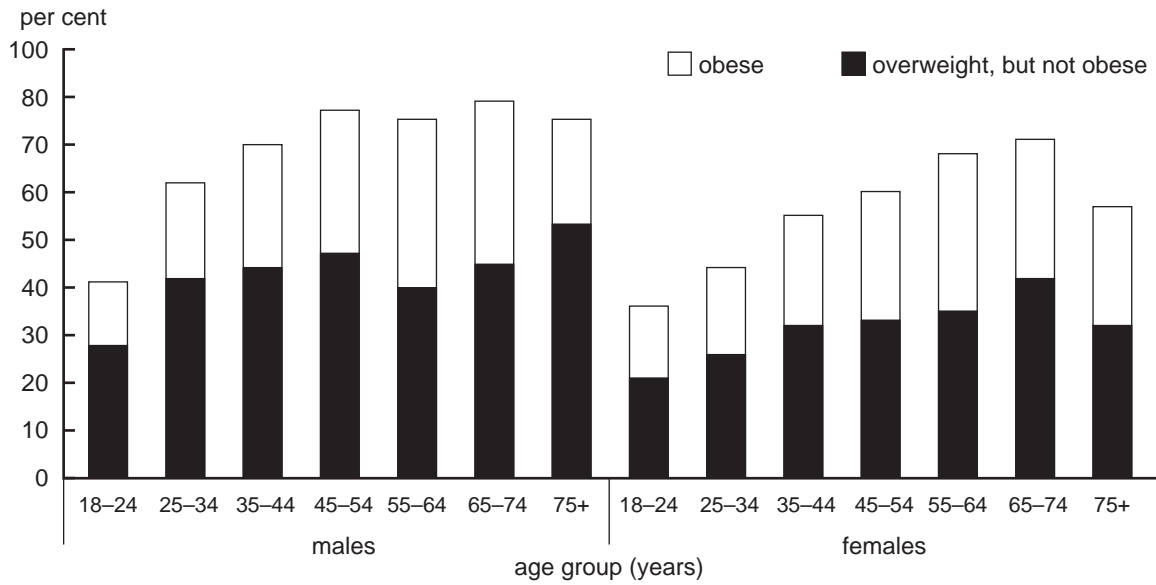
1. _____

2. _____

2 marks

Question 29

Percentage of Australian adults who are overweight or obese by sex and age, 2007–2008



Source: Australian Institute of Health and Welfare, Cardiovascular disease: *Australian facts 2011, Cardiovascular disease series*, cat. no. CVD 53, Canberra, p. 32

a. Outline one measurement that can be used to determine if an adult is obese.

1 mark

b. Using the data in the graph, draw one conclusion about overweight and obese males compared to females.

2 marks

c. Use two priority areas identified in the Ottawa Charter for Health Promotion to describe how the levels of obesity in Australia could be reduced.

priority area 1 _____

description _____

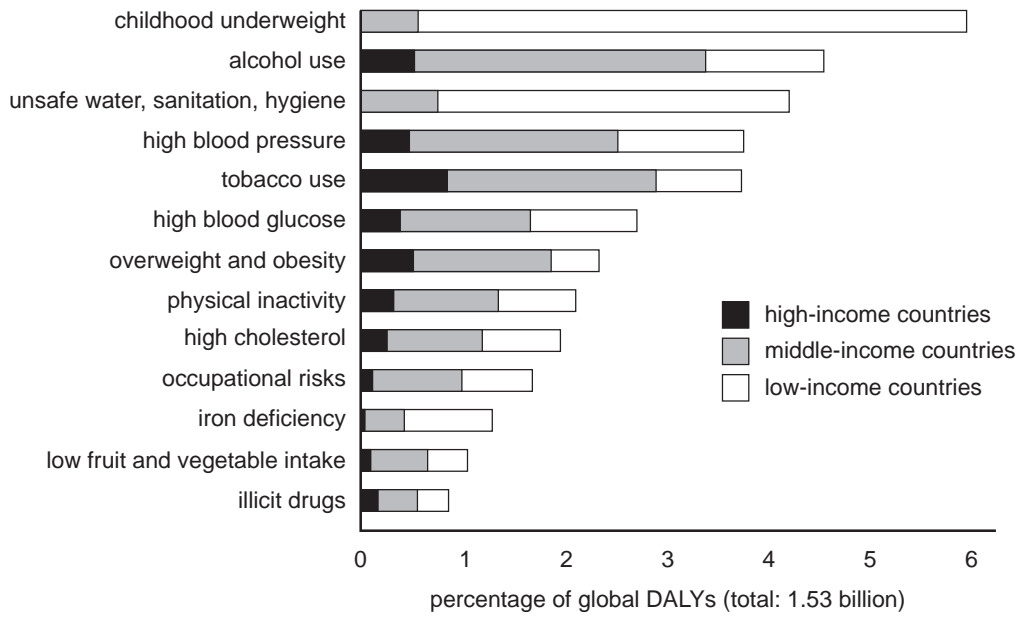
priority area 2 _____

description _____

4 marks

Question 30

Consider the following graph.



Source: World Health Organisation, www.who.int/mediacentre/factsheets/fs349/en/

a. Explain what is meant by global marketing.

2 marks

- b.** **i.** From the graph, select one of the risk factors common to all three income levels for which global marketing plays a role.

- ii.** Discuss the influence that global marketing might have on the risk factor selected in **part i.**

1 + 3 = 4 marks

Question 31 (3 marks)

a. Explain 'health status'.

1 mark

b. Outline the difference between mortality and morbidity as measurements of health status.

2 marks

Question 32 (4 marks)

a. Give **one** example of a socio-cultural factor and **one** example of an environmental factor that could contribute to poorer health status for those living outside of Australia's major cities

2 marks

socio-cultural factor

environmental factor

b. Select **one** of the examples given in **part a.** and explain how it might contribute to variations in health status between those living in and outside of Australia's major cities

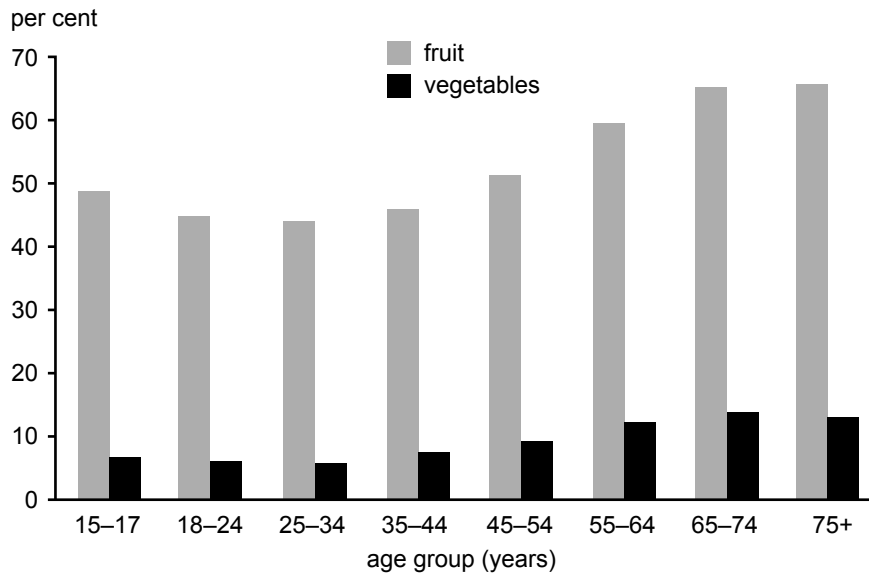
2 marks

example _____

explanation _____

Question 33 (3 marks)

People aged 15 years or over who usually eat the recommended daily intake of fruits and vegetables



Source: Australian Institute of Health and Welfare, *Australia's welfare 2011*, Australia's welfare series no. 10, cat. no. AUS 142, Canberra, 2011, p. 367

a. Identify **one** trend from the graph in relation to the percentage of people who usually eat the recommended daily intake of fruits and vegetables.

1 mark

Question 34 (2 marks)

Explain **one** difference between the biomedical model of health and the social model of health.

Question 35 (4 marks)

Identify two indicators of the Human Development Index (HDI) and outline how they lead to variations in the HDI between Australia and a country with low human development.

indicator 1 _____

outline _____

indicator 2 _____

outline _____

Question 36 (2 marks)

Outline two examples of how Medicare is different from private health insurance.

1. _____

2. _____

Question 37 (2 marks)

How does the United Nations (UN) explain 'sustainability'?

Question 37 (6 marks)

Men's Shed is an initiative of the Australian Men's Shed Association. It has been developed in many local communities across Australia, and it offers men an opportunity to socialise with other men in their community and learn new skills, such as woodworking and the restoration of old furniture.

The Australian Men's Shed Association is a not-for-profit organisation that is funded by the Federal Government. It is now the largest association in Australia focused on men's health and wellbeing.

a. Outline two ways in which this initiative could improve men's health and wellbeing. 2 marks

1. _____

2. _____

b. Identify and explain two principles of the social model of health that are evident in the Men's Shed initiative. 4 marks

1. _____

2. _____

Question 38 (5 marks)



Source: Australian Institute of Health and Welfare, *Australia's health 2010*,
Australia's health series no. 12, cat. no. AUS 122, Canberra, 2010, p. 254

- a.** Using information from the graph, identify how socio-economic status is related to deaths per 100 000. 1 mark

- b.** Identify **one** biological factor and explain how it might contribute to the differences in deaths per 100 000 between the population groups with the highest and lowest socio-economic status. 2 marks

biological factor _____

explanation _____

- c. Death rates are one way in which health status can be measured. Incidence and prevalence are other measurements of health status.

Outline the difference between incidence and prevalence.

2 marks

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2

Question 39 (3 marks)

- a. Explain 'disability adjusted life year (DALY)'.

2 marks

- b. Explain the 'physical dimension of health and wellbeing'.

1 mark

Question 40 (2 marks)

Consider the following information about key health indicators for three high-income countries.

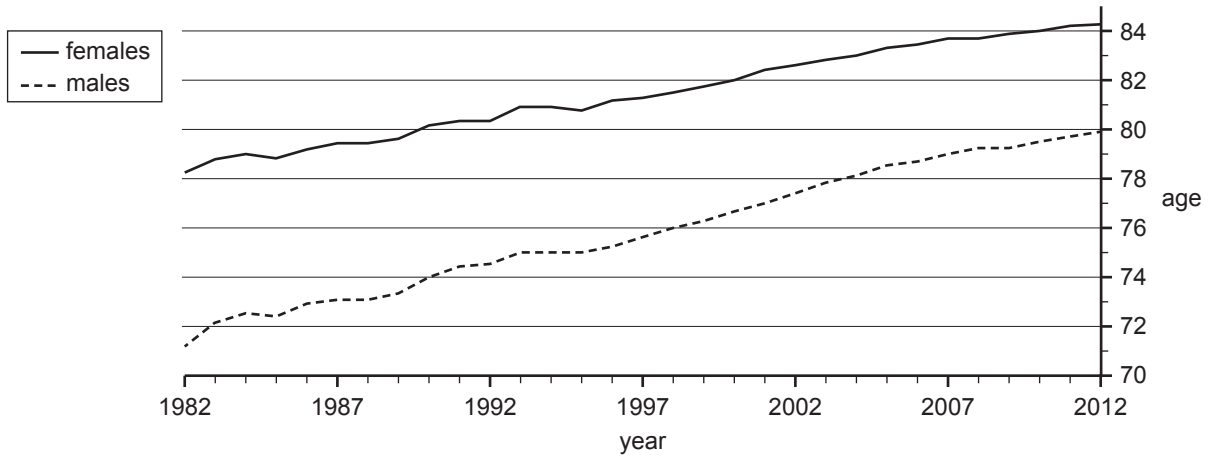
	Life expectancy at birth (both sexes)	Under-five mortality rate (per 1000 live births)	Adult mortality rate (per 1000 population)		Mortality rate (per 100 000 population)
			Male	Female	Communicable diseases
Australia	82	5	80	46	18
Denmark	79	4	103	62	27
New Zealand	81	6	85	55	15

Data: World Health Organization, *World Health Statistics 2013: Part III: Global health indicators*; © World Health Organization 2013

Using data from the table, describe the health status of Australia compared to Denmark and New Zealand.

Question 41 (5 marks)

Australian life expectancy at birth – 1982 to 2010–2012



Source: Australian Bureau of Statistics, 'Life expectancy at birth', in *3302.0 – Deaths, Australia, 2012*

a. Compare the life expectancy of males to females evident in the graph. 1 mark

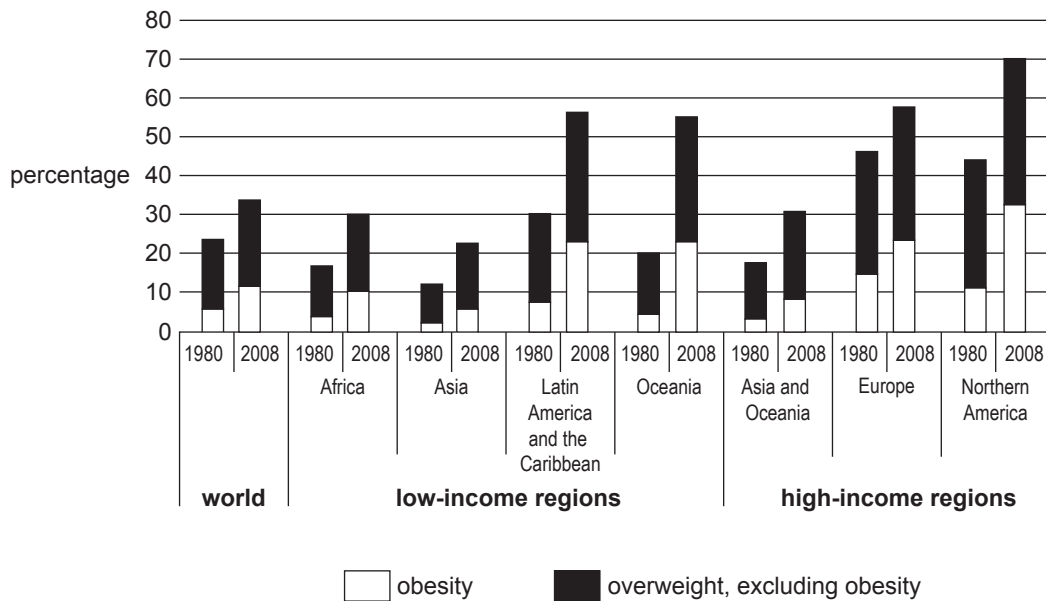
b. Explain how one biological factor and one socio-cultural factor could contribute to the variations in life expectancy between males and females. 4 marks

Biological factor _____

Socio-cultural factor _____

Question 42 (5 marks)

Prevalence of overweight and obesity among adults, by region



Source: Food and Agriculture Organization (FAO) of the United Nations, *The State of Food and Agriculture*, 2013, p. 17

a. Identify the low-income region that has shown the greatest increase in the prevalence of overweight and obesity between 1980 and 2008. 1 mark

b. i. Give **one** example of global marketing that could explain the increase in the percentage of overweight and obesity in low-income regions. 2 marks

ii. Explain the 'double burden of disease'. 2 marks

Question 43 (3 marks)

Local primary schools will receive support to participate in ‘walk to school’ opportunities ... Monash Council has received \$10,000 from VicHealth to implement the Walk to School program ... The program is designed to raise awareness of the physical, environmental and social benefits of active transport, and to encourage school children to walk to and from school more often. Aside from supporting schools, Council will use the funding to develop a Monash walking map and online portal.

Source: *Active Monash*, issue 69, October 2013

a. i. Identify two action areas of the Ottawa Charter for Health Promotion. 2 marks

1. _____

2. _____

ii. Select one of the above action areas and briefly outline how it is reflected in the Walk to School program. 1 mark

Action area _____

Outline _____

Question 44 (4 marks)

Complete the following table by outlining one advantage and one disadvantage of the biomedical model of health and the social model of health.

	Biomedical model of health	Social model of health
Advantage		
Disadvantage		

Question 45 (4 marks)**a. i.** Describe the purpose of Sustainable Development Goal 3.

2 marks

ii. State two reasons why it is important to achieve this goal.

2 marks

1. _____

2. _____

Question 46 (4 marks)

Consider the following data about the Human Development Index (HDI) and measles vaccination.

Country	Human Development Index (HDI) 2012	Measles vaccination (% of one-year-olds) 2010
Australia	0.938	94
Trinidad and Tobago	0.760	92
Benin	0.436	69
Central African Republic	0.352	62

Data: *Human Development Report 2013*, United Nations Development Programme (UNDP), New York, 2013, pp. 144–146 (Table 1) and pp. 166–169 (Table 7)

a. Using the data provided, describe the relationship between measles vaccination rates and the HDI.

1 mark

b. Describe the HDI.

3 marks

Question 47 (4 marks)

The Australian healthcare system consists of private health insurance, Medicare and the Pharmaceutical Benefits Scheme (PBS).

a. What is private health insurance?

2 marks

c. Provide one similarity and one difference between Medicare and the PBS.

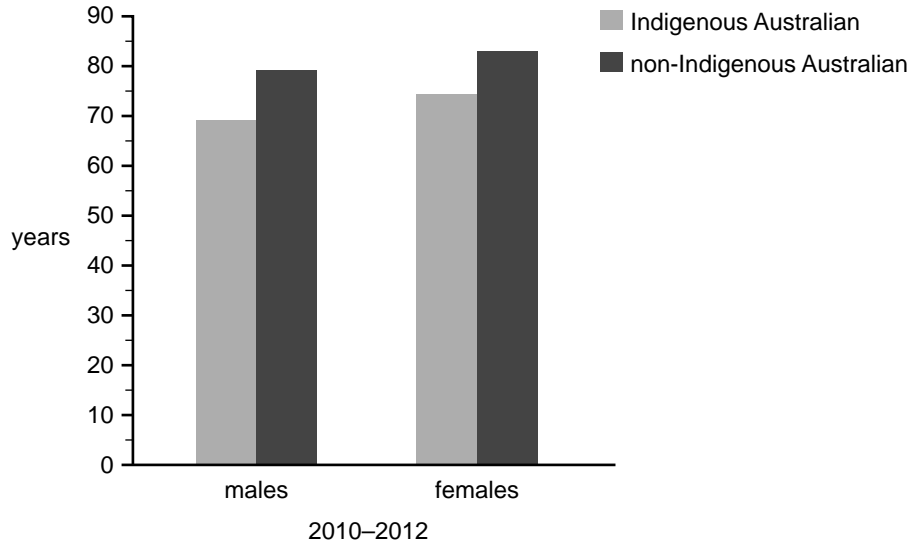
2 marks

Similarity _____

Difference _____

Question 48 (9 marks)

Life expectancy at birth, by sex and Indigenous status, 2010–2012



Data: Australian Bureau of Statistics, *Fact sheet: Life expectancy estimates for Aboriginal and Torres Strait Islander Australians, 2010–2012*, cat. no. 3302.0.55.003

a. Explain the difference between life expectancy and health-adjusted life expectancy. 2 marks

b. Use the data in the graph above to compare the health status of non-Indigenous Australian males and females to Indigenous Australian males and females. 2 marks

c. Explain why mental health differs between non-Indigenous Australians and Indigenous Australians.

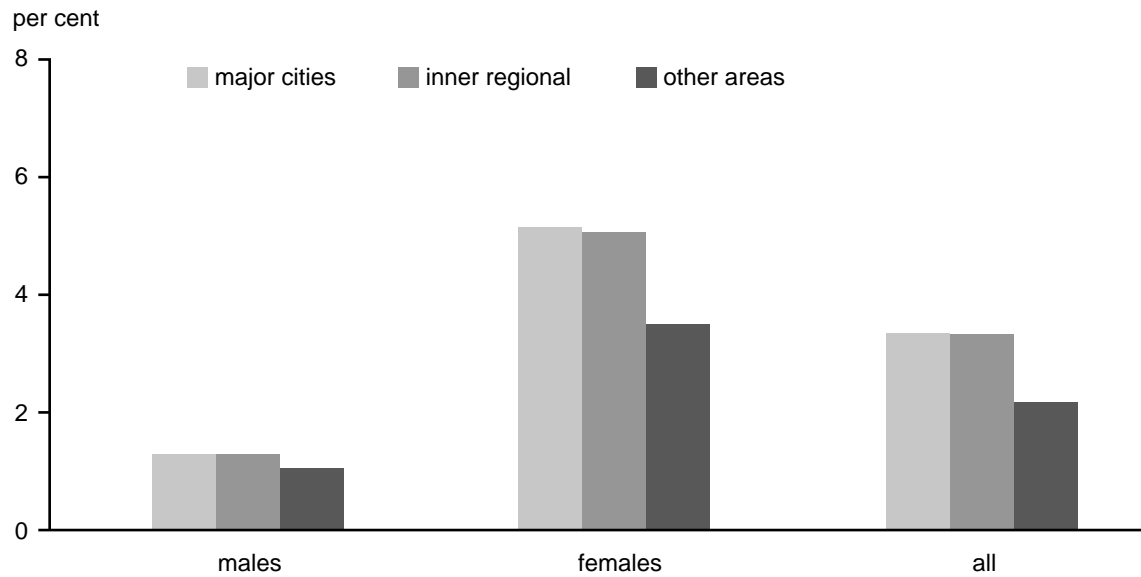
2 marks

d. Select one socio-cultural factor and explain how it might contribute to the differences in life expectancy at birth between non-Indigenous Australians and Indigenous Australians.

3 marks

Socio-cultural factor _____

Explanation _____

Question 49 (3 marks)**Regional variations in the prevalence of osteoporosis**

Source: Australian Institute of Health and Welfare, *A snapshot of osteoporosis in Australia 2011*, Arthritis series no. 15, cat. no. PHE 137, Canberra, 2011, p. 4

a. Explain 'prevalence'.

1 mark

b. Identify two trends evident in the graph above.

2 marks

1.

2.

Question 50 (8 marks)

Between 2011 and 2013, the Australian Government conducted the Australian Health Survey (AHS), which collected in-depth data on nutrition. One of the preliminary findings was that the average daily consumption of sodium was 2404 mg per day, significantly higher than the 460–920 mg recommended by the National Health and Medical Research Council (NHMRC).

- a.** Why does the Australian Government conduct nutrition surveys? 2 marks

- b.** Name the Australian Dietary Guideline that is related to sodium consumption. 1 mark

- c.** Outline how excessive sodium consumption can have an impact on health. 2 marks

- d.** Describe **one** program, developed by a non-government organisation, that may address sodium consumption. 3 marks

Question 51 (8 marks)

Indicators of health status for a range of countries

Country	Human Development Index* (2013)	Life expectancy at birth* (2013)	Under-five mortality rate (per 1000 live births)* (2013)	Maternal mortality ratio (deaths per 100 000 live births)† (2013)	Births attended by skilled personnel (%)‡**
Australia	0.933	82.5	5	6	99.1
Turkey	0.759	75.3	14	20	91.3
Chad	0.372	51.2	150	980	16.6

Data: *United Nations Development Programme, 'Human Development Reports';
 †The World Bank, maternal mortality ratio data;
 ‡World Health Organization, 'Global Health Observatory Data Repository',
 **Australia 2009, Turkey 2008, Chad 2010

a. Using data from the table, describe the health status of Australia compared to Chad. 2 marks

b. Using data from the table, explain how access to healthcare could contribute to the differences in health status between Australia and Chad. 3 marks

c. Turkey's Human Development Index (HDI) increased from 0.496 to 0.759 between 1980 and 2013. In the same period, the average life expectancy rose by 16.6 years. 3 marks
 List three other HDI indicators that may have also increased.

1. _____
2. _____
3. _____

Question 52 (2 marks)

- a. List **one** service that is covered by Medicare and explain how this service can improve the health status of Australians.

2 marks

Question 53 (2 marks)

The following data relates to the health status of Indigenous and non-Indigenous Australians.

	Prevalence of diabetes mellitus (age-standardised per cent)*	Incidence of type 1 diabetes (per 100 000)†	Mortality with diabetes as underlying cause (per 100 000)*
Indigenous	15	7	89.4
Non-Indigenous	4.7	10	15.6

Data: *Australian Institute of Health and Welfare, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples 2015*, cat. no. IHW 147, AIHW, Canberra, 2015;

†Australian Institute of Health and Welfare, *Incidence of Type 1 Diabetes in Australia 2000–2013*, 'Diabetes' series no. 23, cat. no. CVD 69, AIHW, Canberra, 2015

- a. Use data from the table to compare the health status of Indigenous and non-Indigenous Australians.

2 marks

Question 54 (4 marks)

The federal government developed the Australian Dietary Guidelines. Nutrition Australia has used these guidelines as the basis for the development of the Healthy Eating Pyramid.

Choose two of the Australian Dietary Guidelines and explain how each is reflected in the Healthy Eating Pyramid.

1. _____

2. _____

Question 55 (2 marks)

Consider the following information regarding the health status of Australia and other developed countries.

Indicators of health status for a range of countries (2013)

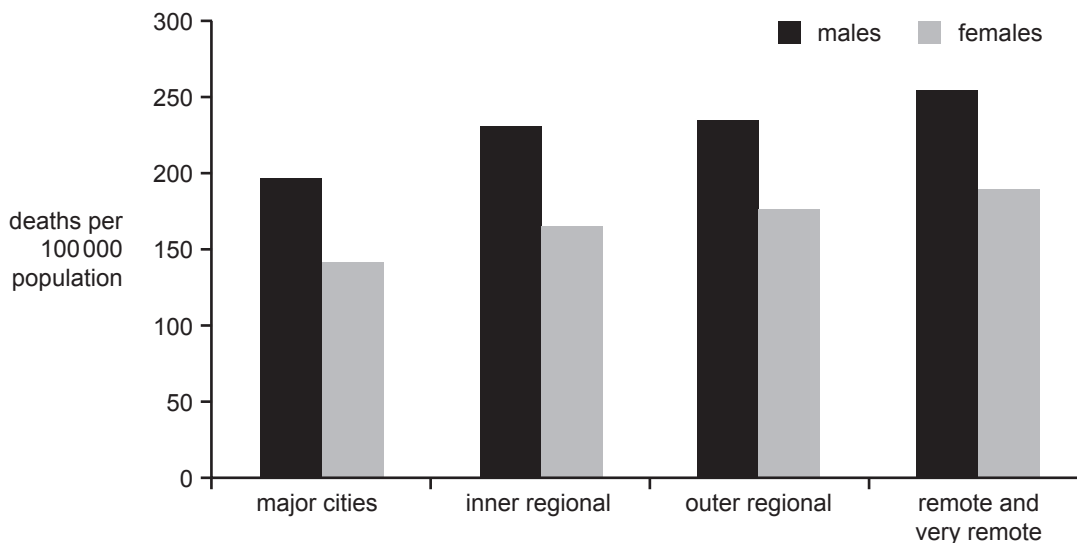
Country	Adult mortality rate (deaths per 1000)		Infant mortality rate (deaths per 1000 live births)	Life expectancy at birth	Incidence of tuberculosis (per 100 000 per year)
	Male	Female			
Australia	78	45	3.4	83	6.2
Iceland	61	37	1.6	82	3.6
Japan	81	42	2.1	84	18

Data: World Health Organization, 'Part II. Global Health Indicators', *World Health Statistics 2015*

Using data from the table, describe the health status of Australia compared to Iceland and Japan.

Question 56 (12 marks)

Cardiovascular disease death rates, by remoteness and sex, 2009–2011



Source: Australian Institute of Health and Welfare, *Cardiovascular Disease, Diabetes and Chronic Kidney Disease – Australian Facts: Mortality*, ‘Cardiovascular, Diabetes and Chronic Kidney Disease’ series no. 1, cat. no. CDK 1, AIHW, Canberra, 2014

a. Identify **one** trend in the graph above. 1 mark

b. Identify one biological and one socio-cultural factor of health and explain how each could contribute to the trend identified in **part a.** 4 marks

Biological _____

Socio-cultural _____

c. Cardiovascular diseases contribute to 14% of the total burden of disease in Australia and New Zealand.

i. What is meant by 'burden of disease'?

2 marks

ii. How is burden of disease measured?

1 mark

d. Explain how both the biomedical and social models of health could be used to reduce the burden of disease associated with cardiovascular disease.

4 marks

Question 57 (5 marks)

Obesity is placing a heavy burden on the world’s population in both rich and poor countries. Almost 30 per cent of people globally are now either obese or overweight. Two-thirds of the obese population now live in low- and middle-income countries, which also experience high rates of undernutrition.

- a.** Explain how global marketing has contributed to the increase in the number of people who are overweight or obese. 2 marks

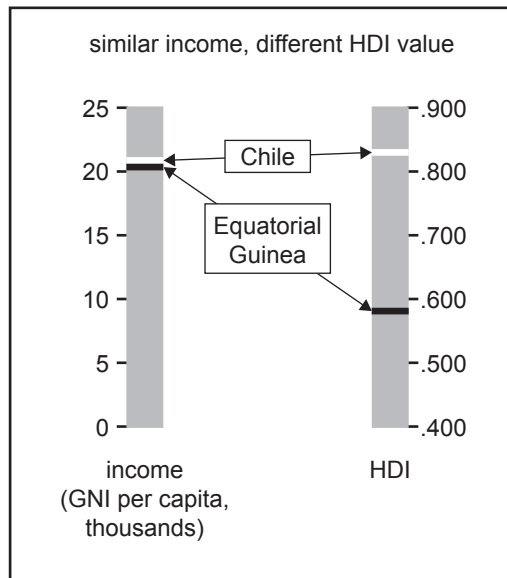
- b.** Undernutrition is much more prevalent in low-income countries than in Australia. Select one example of a environmental factor and explain how it could contribute to this variation. 3 marks

Example _____

Explanation _____

Question 58

The following graph compares the income and Human Development Index (HDI) of Chile and Equatorial Guinea.



Source: United Nations Development Programme, *Human Development Report 2015: Work for Human Development*, UNDP, New York, 2015, p. 57

- a. Explain how two countries can have a similar income (GNI per capita) but a quite different HDI.

2 marks

Question 59 (4 marks)

The following table shows indicators of health status for a range of countries.

Country	Life expectancy at birth (years), both sexes	Healthy life expectancy at birth (years)	Under-five mortality rate (per 1000 live births)	Tuberculosis incidence (per 100 000 population)
Australia	82.8	71.9	3.8	6.4
Sierra Leone	50.1	44.4	120.4	310.0
Denmark	80.6	71.2	3.5	7.1
Vietnam	76.0	66.6	21.7	140.0
Spain	82.8	72.4	4.1	12.0

Data: World Health Organization, *World Health Statistics 2016: Monitoring Health for the SDGs*, Geneva, 2016, pp. 104, 105, 108–111

- a.** Outline the difference between mortality and morbidity as measures of health status. 2 marks

- b.** Draw one conclusion about the health status of Australia compared to another high-income country. Use data from the table to justify your answer. 2 marks

High-income country _____

Conclusion _____

Question 60 (2 marks)

4

- a.** Describe the mental dimension of health and wellbeing.

2 marks

Question 61 (3 marks)

Consider the following information regarding a VicHealth project.

Victorian workplace mental wellbeing collaboration

VicHealth, SuperFriend and WorkSafe Victoria have formed a collaboration to help workplaces create positive and supportive cultures and environments that enable workers to be more engaged, positive and effective at work.

Victorian workers spend around one-third of their time in the workplace and the work environment can provide a positive sense of community and connection with others, as well as build self-esteem and provide recognition and rewards for individual workers and teams.

Approaches such as developing a positive leadership style, designing jobs for mental wellbeing, communicating effectively, recruitment and selection of employees, work-life demands, and supporting and developing employees are all important components of workplace mental wellbeing.

Source: © Victorian Health Promotion Foundation (VicHealth);
source material available at <www.vichealth.vic.gov.au>

- a.** Identify one principle of the social model of health and explain how it is reflected in the project described above.

3 marks

Principle _____

How it is reflected in the project _____

Question 62 (7 marks)

Oliver is a 51-year-old male. He smokes 10 cigarettes a day and has a minimal alcohol intake. Oliver's body weight is quite high and he has little time to exercise. Oliver has been diagnosed with high cholesterol and he suffers from hypertension, placing him at risk of cardiovascular disease.

a. Describe cardiovascular disease.

2 marks

b. Select one biological factor evident in the information provided above. Explain how this biological factor could increase the risk of cardiovascular disease.

3 marks

Biological factor _____

Explanation _____

c. Oliver has been advised by his doctor to make changes to his diet to reduce his sodium intake.

Identify one major food source of sodium. Outline the role sodium plays in increasing the risk of cardiovascular disease.

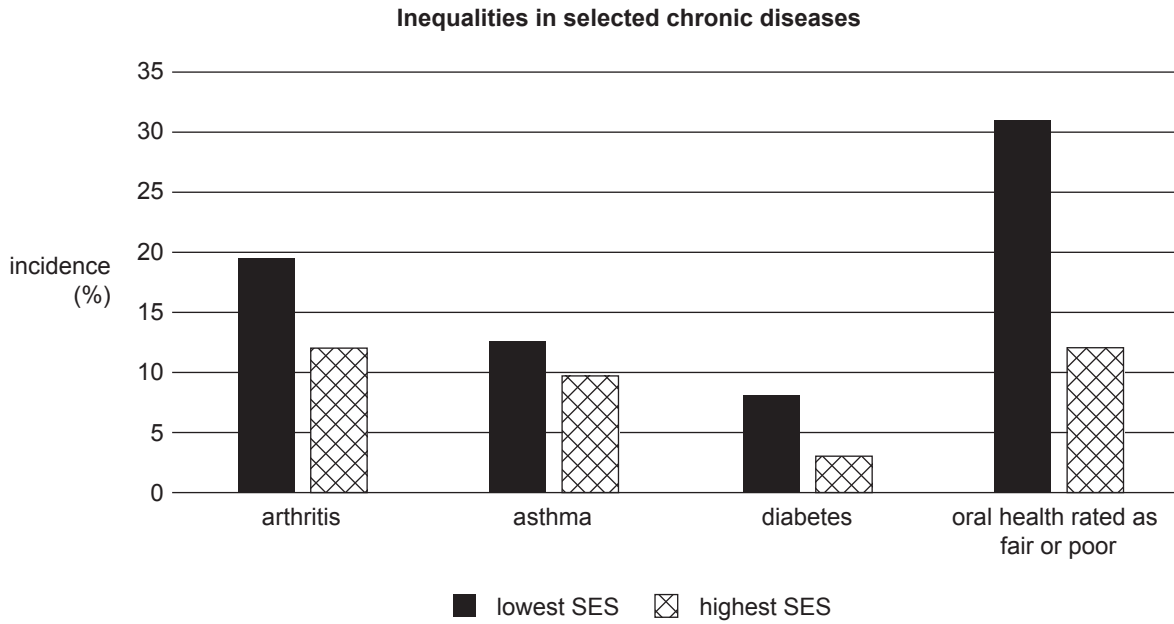
2 marks

Major food source of sodium	
Role in increasing the risk of cardiovascular disease	

TURN OVER

Question 63 (8 marks)

The following graph shows the incidence of selected chronic diseases by socio-economic status (SES) in Australia in 2014–2015.



Data: Australian Institute of Health and Welfare (AIHW), *Australia's Health 2016*, 'Australia's Health' series no. 15, cat. no. AUS 199, AIHW, Canberra, 2016, p. 184

- a.** Outline the relationship between SES and health status shown in the graph above. 1 mark

- b.** Identify one environmental factor. Explain how it may contribute to the relationship described in **part a.** 3 marks

Environment factor _____

Contribution to relationship _____

c. Select one chronic disease from the graph. Explain how two action areas of the Ottawa Charter for Health Promotion could be used to address this chronic disease.

4 marks

Chronic disease _____

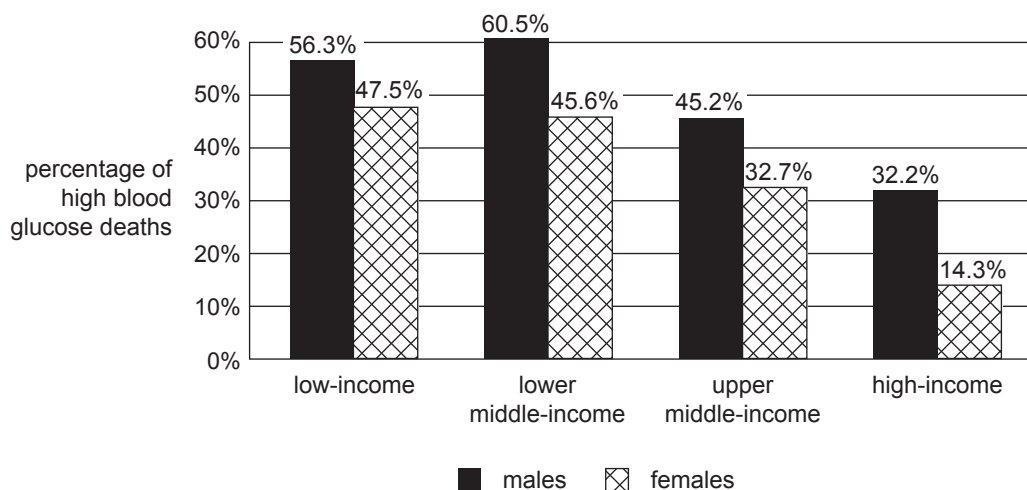
Action area 1 _____

Action area 2 _____

Question 64 (5 marks)

The graph below groups countries according to their gross national income per capita. Countries in the upper middle-income and high-income groups are more likely to be identified as developed. Countries in the lower middle-income and low-income groups are more likely to be identified as developing.

The graph shows the percentage of deaths that were attributed to high blood glucose levels for males and females aged 20–69 years according to country income group in 2012.



Source: World Health Organization, *Global Report on Diabetes*, Geneva, 2016, p. 23

- a.** In which country income group is the percentage of high blood glucose deaths the highest for males?

1 mark

- b.** The graph shows that there are differences in the percentage of deaths attributed to high blood glucose between high-income and low-income countries.

Discuss how global marketing and access to healthcare could have contributed to these differences.

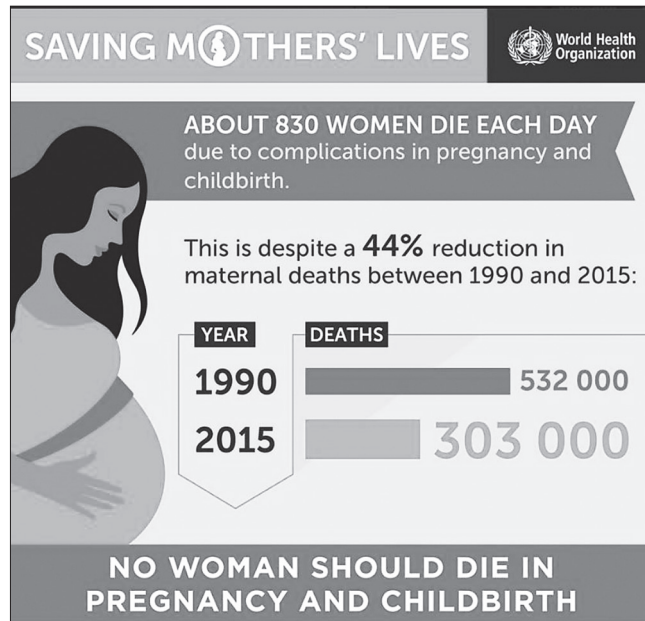
4 marks

Global marketing _____

Access to healthcare _____

TURN OVER

Question 65 (3 marks)



Source: © World Health Organization 2015

a. i. Name the SDG represented in the information above. 1 mark

ii. Outline two reasons why the SDG named in **part a.i.** is important. 2 marks

1. _____

2. _____

Question 66 (6 marks)

a. Outline how life expectancy differs from health-adjusted life expectancy.

2 marks

b. Explain how changes in policy and practice relating to ‘old’ public health may have contributed to Australia’s health status over time.

4 marks

Question 67 (5 marks)

a. What is meant by 'new' public health?

2 marks

b. Analyse **one** way in which 'new' public health may have contributed to improvements in Australia's life expectancy over time.

3 marks

Question 68 (6 marks)

Sam is 25 years old and loves to play hockey. Sam recently suffered a broken leg and will be unable to play hockey for at least two months. Watching the team play has led to Sam feeling frustrated and upset.

- a.** Referring to the information above, explain why the concept of health and wellbeing is considered to be dynamic.

2 marks

- b.** Explain the spiritual dimension of health and wellbeing.

2 marks

- c.** Explain why Sam could still have optimal spiritual health and wellbeing.

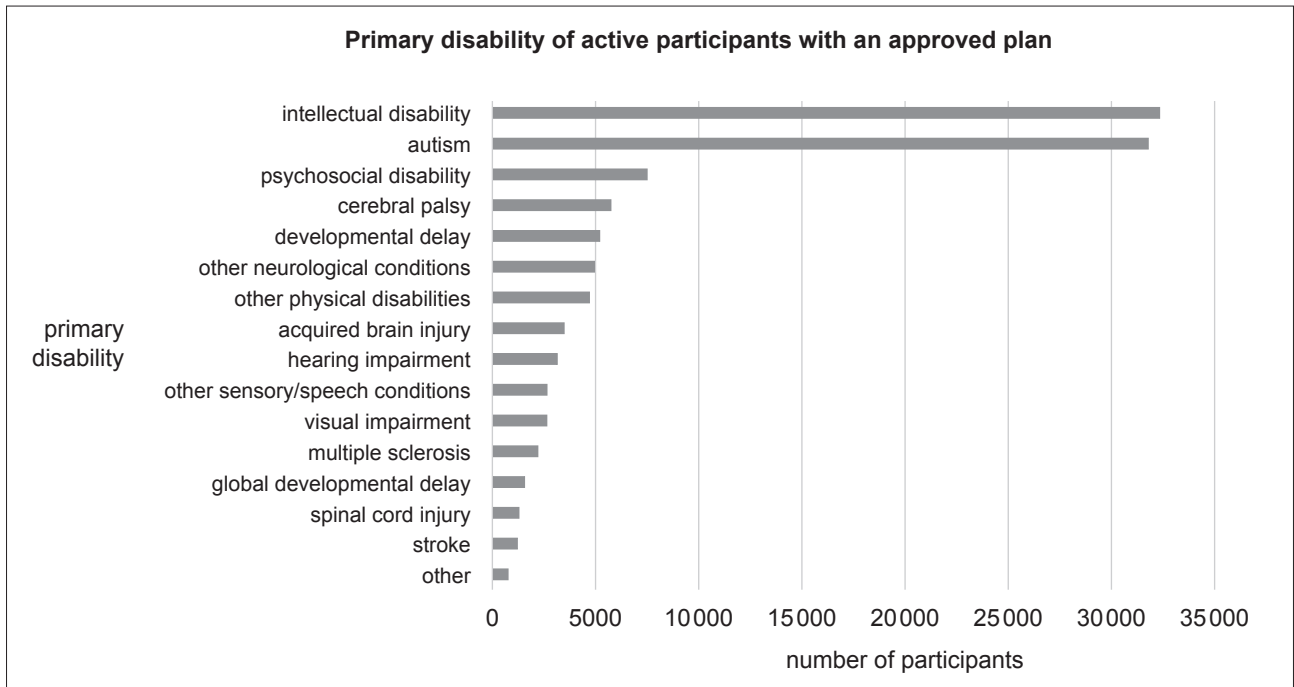
2 marks

Question 69 (8 marks)

Consider the following three sources relating to the National Disability Insurance Scheme (NDIS).

Source 1

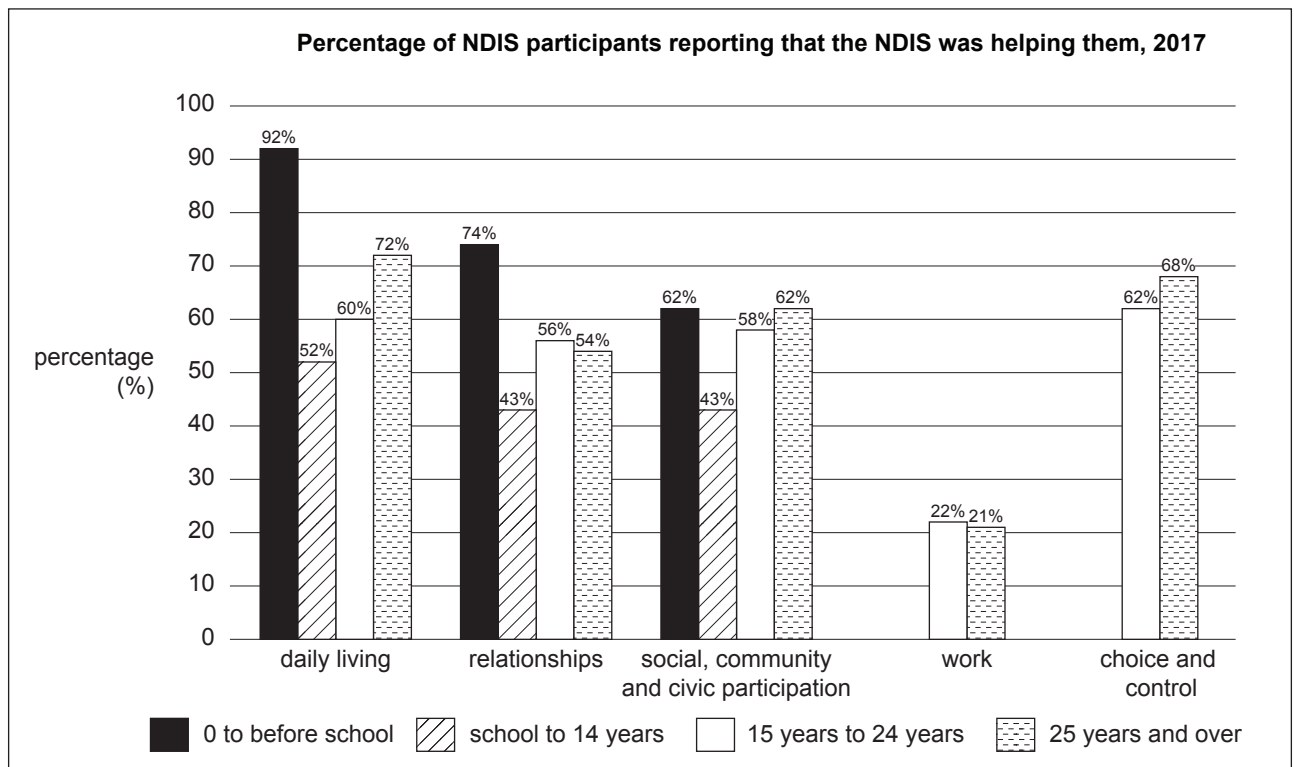
The following data is from the NDIS quarterly report (September 2017).



Data: NDIS, 'National Dashboard as at 30 September 2017', 1st quarterly report (2017–2018 Q1), <www.ndis.gov.au>; © National Disability Insurance Scheme Launch Transition Agency

Source 2

The following data is from the NDIS quarterly report (December 2017).



Source: NDIS, 'COAG Disability Reform Council Quarterly Performance Report', National, 31 December 2017, p. 18; © National Disability Insurance Scheme Launch Transition Agency

Source 3

The following information relates to a child who has recently been diagnosed with autism.

Anna’s son Daniel is in primary school and has been diagnosed with autism. This diagnosis means he is eligible for assistance through the NDIS. James, the NDIS Local Area Coordinator, met with Anna to discuss Daniel’s needs and goals, and developed an individual NDIS plan for Daniel. James was able to connect Anna with workshops for parents, designed to develop their knowledge of autism and ways to help their children build their skills and independence. Part of the plan included funding for a backyard playground to help Daniel participate in activities to improve his imagination.

Using the information provided, analyse the NDIS’s contribution to optimal health and wellbeing as a resource both individually and nationally.

Question 70 (7 marks)

According to the 2012–2013 Australian Aboriginal and Torres Strait Islander health survey:

- obesity rates for Aboriginal and Torres Strait Islander males and females were significantly higher than the comparable rates for non-Indigenous people in almost every age group
- Aboriginal and Torres Strait Islander rates for heart disease were significantly higher than the comparable rates for non-Indigenous people in all age groups from 15–54 years
- Aboriginal and Torres Strait Islander rates for diabetes/high sugar levels were between three and five times as high as the comparable rates for non-Indigenous people in all age groups from 25 years and over.

Data: Australian Bureau of Statistics (ABS) website, ‘Australian Aboriginal and Torres Strait Islander Health Survey: First Results, Australia, 2012–13’, cat. no. 4727.0.55.001, <www.abs.gov.au>

- a.** Select one sociocultural factor and explain how this factor could account for the differences in Indigenous and non-Indigenous health status identified in the health survey.

3 marks

Sociocultural factor _____

- b.** Referring to information from the health survey above, explain how the *Australian Dietary Guidelines* could assist in improving Indigenous health status.

4 marks

Question 71(10 marks)

‘Koori community kitchen’ is a small cooking program targeting urban Aboriginal people in Victoria.

The program aims to empower the community and promote a healthier wellbeing. The ‘Koori community kitchen’ acts as a meeting place for members of the Koori community and provides an opportunity to support these community members with their health and wellbeing issues.

The kitchen is open to any Koori community member to meet and have a chat with other community members in a culturally friendly environment. The program runs every Thursday ... and is coordinated by Peninsula Health.

Source: Australian Indigenous HealthInfoNet, Programs & projects, ‘Koori community kitchen’, <<https://healthinonet.edu.edu.au>>

- a.** Describe how the ‘Koori community kitchen’ program could improve social and emotional health and wellbeing.

4 marks

- b.** Identify and describe two action areas of the Ottawa Charter for Health Promotion that are reflected in the ‘Koori community kitchen’ program and explain how they are evident.

6 marks

Action area 1 _____

Action area 2 _____

TURN OVER

Question 72 (10 marks)

The following table shows indicators of health status for a range of countries.

	Fertility rate, total (births per woman)*	Mean years of schooling†	Cancer death rate per 100 000 (males)‡	Chronic respiratory disease death rate per 100 000 (males)‡	Human Development Index†
Australia	1.8	13.2	135.9	27.8	0.939
South Sudan	4.9	4.8	121.1	63.2	0.418
Greece	1.3	10.5	157.0	34.2	0.866
France	2.0	11.6	179.8	18.7	0.897
Niger	7.3	1.7	57.5	49.1	0.353

Data: *The World Bank, World Development Indicators: Reproductive health, Table 2.14, <www.worldbank.org>;

†United Nations Development Programme, Human Development Reports, International Human Development Indicators, <http://hdr.undp.org/en/countries>;

‡World Health Organization, *Global Status Report on noncommunicable diseases 2014*, pp. 154–161

- a.** Identify a low-income country from the table above and use data from the table to justify your response.

2 marks

Low-income country _____

Justification _____

b. i. Describe the Human Development Index (HDI). **2 marks**

ii. Outline one advantage and one limitation of the HDI. **2 marks**

Advantage _____

Limitation _____

c. i. Identify **one** feature of Sustainable Development Goal (SDG) 3, ‘Good health and wellbeing’, that is relevant to addressing the health issues shown in the table on page 10. **1 mark**

ii. Explain how actions taken to achieve SDG 4, ‘Quality education’, could assist in achieving SDG 3. **3 marks**

Question 73 (12 marks)

Afghan Farmers Adopt Modern Agricultural Practices on Orchards

Farmer Abdul Azim ... is able to irrigate his orchard in Zarshakh village, thanks to the recently installed solar water pump. Zarshakh ... is one of the most water deficient villages in Paghman district in eastern Kabul Province [Afghanistan]. While residents derive most of their income from horticulture, they were hardly ever able to enjoy fresh farm produce themselves ...

In March 2016, the National Horticulture and Livestock Project (NHLP)¹ ... dug a water well and installed the solar water pump for Azim ... The total cost was around 670 000 afghanis (about US\$10 000), of which NHLP covered 75 per cent while the rest was paid by Azim. [A US\$190 million grant was provided by the World Bank to assist the Afghan Government in funding the project.]

‘We used to spend 300 000 afghanis (about US\$5500) in any given year to buy fuel for generators to power pumps to get water for our farmland,’ Azim says. ‘With the installation of the solar water pump, I saved all that money and yet, for the first time in my village, I had enough water for irrigation.’

The installation of the solar water pump has helped Azim expand his farm from 1.4 to 2.4 hectares. ‘Before the solar pump, most of my farmland lay barren. I did not even have vegetables on my table regularly,’ he says. ‘But in these six months, I not only have vegetables, I have enough to give to my neighbours too.’

...

NHLP covers 14 districts in Kabul Province. In 2016, the project established more than ... 1600 hectares, of new almond, apple, and apricot orchards, built 84 raisin drying houses, and 35 irrigation reservoirs. To date, 17 water wells have been dug and 12 solar water pumps installed for farmers who faced water shortage. ‘Our activities have helped farmers in Kabul and their produce can now compete with imported fruits in Afghanistan,’ says Baryalay Momand, NHLP’s provincial coordinator for Kabul.

Source: The World Bank, ‘Afghan Farmers Adopt Modern Agricultural Practices on Orchards’, feature story, 23 August 2017, <www.worldbank.org>

¹**National Horticulture and Livestock Project (NHLP)** – operated by the Afghan Government and promotes improved farming practices

a. Describe the type of aid represented in the program above. **2 marks**

b. Explain how this program promotes human development. **2 marks**

Question 74 (4 marks)

a. Explain the term 'discrimination'.

2 marks

b. Explain how discrimination might contribute to differences in health status and burden of disease.

2 marks

b. Describe and justify two examples of social actions that could be taken to address the increasing rates of childhood obesity.

4 marks

Example 1 _____

Example 2 _____

Question 77 (11 marks)

Adi Chocolates – Artisan chocolate from Fiji for the tourism sector and exports

In Fiji cocoa beans were left to rot under the trees and cocoa gardens were not maintained. The Government of Fiji had promoted cocoa ... to [help] diversify exports but when world market prices [fell] in the 1980s, Fiji became too expensive and buyers interested in cheap cocoa in bulk stayed away. Around the same time, the tourism sector started to grow in Fiji and with it grew the demand for high-quality local chocolate for use in resort kitchens for chocolate fountains and pastry or for tourists in search of authentic Fijian products. In June 2012, Adi Chocolates stepped into this gap and started producing high-quality dark chocolate by hand for the tourism sector and exports, thereby creating a new demand for local beans and a renewed interest among farmers to start harvesting and maintaining their gardens.

MDF¹ [Market Development Facility] invested in a partnership with Adi Chocolates to upscale production from a purely manual, kitchen-based operation to a partially mechanised process, able to produce a larger volume and more variety of chocolates ... [One of the activities that occurred under the partnership was the recruitment] of an ‘outgrower manager’ to maintain relations with farmers and teach them how to prune their cocoa gardens and dry and ferment their cocoa beans for better yields and better quality cocoa ...

Adi Chocolates now supplies up to 40 major resorts, restaurants and retailers around Fiji and also has started to export to Japan as well as to some retail outlets in Europe. As Adi Chocolates opens up the market for Fijian chocolate, demand for cocoa from Fijian farmers will grow. As a result, by 2017, 70 farmers [were earning] an additional income of around FJD 200 per year.

Source: Market Development Facility, ‘Partnerships for the Pro-Poor Growth – Adi Chocolates Fiji’, <<http://marketdevelopmentfacility.org>>

¹MDF – a multi-company, private sector development program funded by the Australian Government

- a.** Identify **one** priority area of Australia’s aid program that this initiative represents. 1 mark

- b.** Describe how this initiative reflects the features of Australia’s aid program. 3 marks

c. Increased world trade and tourism is one example of a global trend.

Using examples from this initiative, analyse the implications of increased world trade and tourism for health and wellbeing.

3 marks

d. i. What is meant by 'sustainability'?

1 mark

ii. Explain how the Australian Government's investment in Adi Chocolates contributes to sustainability.

3 marks

TURN OVER

Question 78 (2 marks)

Peace is a WHO prerequisite for health.

Explain how peace can lead to improved health outcomes.

Instructions

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

Question 79 (6 marks)

a. Social justice and equity are prerequisites for health.

Describe social justice and equity.

2 marks

Social justice _____

Equity _____

b. Select **either** social justice **or** equity and explain why it is a prerequisite for health at an individual level and at a global level.

4 marks

Prerequisite for health selected _____

Question 80 (4 marks)**Bush Classrooms project**

In Western Australia a bush clinic for Aboriginal men has been implemented with the aim of breaking down barriers to accessing hospitals and healthcare. It has brought together health experts from hospitals and mostly Noongar men into the bush to talk about mental and physical health.

Shame and a lack of confidence in the quality of treatment they receive can keep many Aboriginal men living in Western Australia's great southern region well away from modern health services.

A group of 25 men attended the Bush Classrooms project on culturally significant sites around Albany once a week for seven weeks. The program provided a comfortable, safe setting in which information could be shared with Aboriginal people.

The program combined hunting, fishing, dancing and music, with education and counselling opportunities for participants. The Bush Classrooms project is a collaboration between local support services, including Great Southern Aboriginal Health Services, the Albany Youth Support Association, Wanslea Family Services and Palmerston.

Source: adapted from Aaron Fernandes, 'Bush clinic for Indigenous men aims to break down barriers to hospital', ABC Great Southern, 14 April 2018, <www.abc.net.au/>; reproduced by permission of the Australian Broadcasting Corporation – Library Sales; Aaron Fernandes © 2018 ABC

- a.** Identify **one** principle of the social model of health and explain how it is reflected in the Bush Classrooms project.

2 marks

- b.** Provide two examples of how the health status of Indigenous people compares to the health status of non-Indigenous people.

2 marks

1. _____

2. _____

Question 81 (6 marks)

a. List **two** major food sources that contain the mineral iron.

2 marks

b. Using the example of a low dietary intake of iron, describe the interrelationships between the dimensions of health and wellbeing.

4 marks

Question 82 (5 marks)

As part of National Nutrition Week, Nutrition Australia launched the annual Tryfor5 campaign, which is designed to encourage Australians to increase their vegetable consumption to the recommended five serves per day.

- a.** Explain how consuming the recommended five serves per day of vegetables would have an impact on the burden of disease in Australia.

3 marks

- b.** In addition to National Nutrition Week, outline **one** other way in which Nutrition Australia promotes healthy eating.

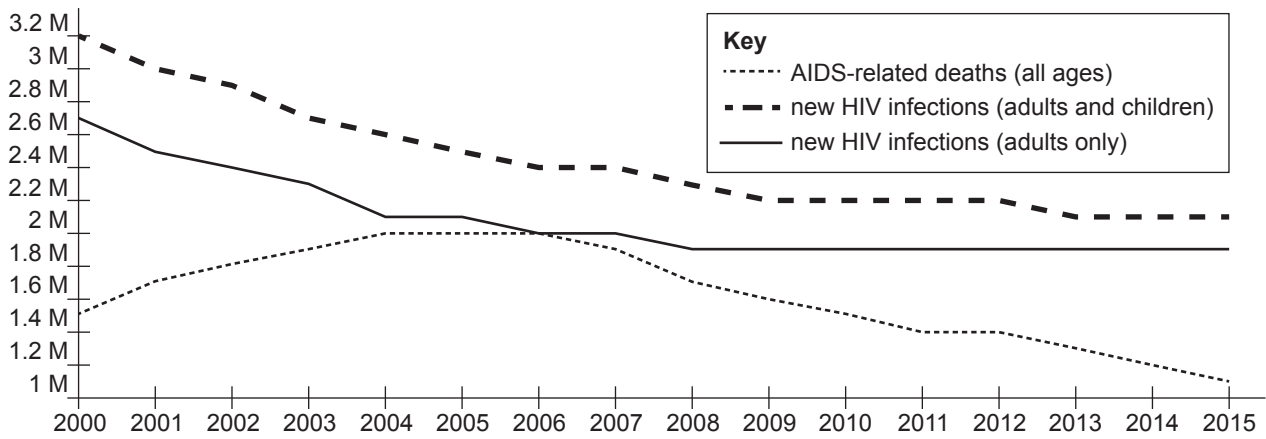
2 marks

Question 83 (10 marks)

Consider the following three sources relating to HIV/AIDS.

Source 1

Global annual AIDS deaths and new infections, 2000–2015 (in millions)



Source: United Nations Population Fund, <www.unfpa.org/hiv-aids>; UNAIDS 2016

Source 2



Source: World Health Organization, 'World AIDS Day 2018', <www.who.int/campaigns/world-aids-day/world-aids-day-2018>

Source 3

Mosiya lives in rural Tanzania with her 60-year-old grandmother and three younger brothers. Mosiya was 13 when she and her brothers were orphaned, both parents dying from AIDS complications due to the lack of access to antiretroviral medication. Now, at the age of 15, due to poverty Mosiya has been forced to leave school to work at the local coffee plantation. The income she earns is sufficient to meet her family's basic food needs. However, Mosiya and her grandmother grow additional vegetables to supplement the family's diet and to sell at the local village market. The money raised is used to pay for her brothers' school materials. Mosiya is fortunate as other girls in her village have been forced to work in the sex industry.

Using the information provided and your understanding of the key features of Sustainable Development Goal (SDG) 3, analyse how addressing the HIV/AIDS epidemic can lead to an improvement in health and wellbeing and the achievement of **one** other SDG.

Lined writing area consisting of 20 horizontal lines.

Question 84 (4 marks)

According to the United Nations Development Programme's Human Development Report, in 2017 Australia had a Human Development Index (HDI) of 0.939, while Papua New Guinea had an HDI of 0.544. The World Bank classifies Australia as a high-income country and Papua New Guinea as a middle-income country.

- a.** Use **two** indicators of human development to explain the differences in HDI between Australia and Papua New Guinea.

2 marks

- b.** Outline **two** characteristics, other than HDI, that could be used to classify countries as either high-income or middle-income countries.

2 marks

Question 85 (5 marks)

World Antibiotic Awareness Week aims to increase awareness of global antibiotic resistance and to encourage best practices among the general public, health workers and policy makers to avoid the further emergence and spread of antibiotic resistance.

A global action plan to tackle the growing problem of resistance to antibiotics and other antimicrobial medicines was endorsed at the Sixty-eighth World Health Assembly in May 2015. One of the key objectives of the plan is to improve awareness and understanding of antimicrobial resistance through effective communication, education and training.



Source: World Health Organization, text from <www.who.int/campaigns/world-antibiotic-awareness-week>, infographic from <www.who.int/campaigns/world-antibiotic-awareness-week/world-antibiotic-awareness-week-2018/advocacy-material>

- a. Identify and describe **one** World Health Organization (WHO) strategic priority reflected in the information above.

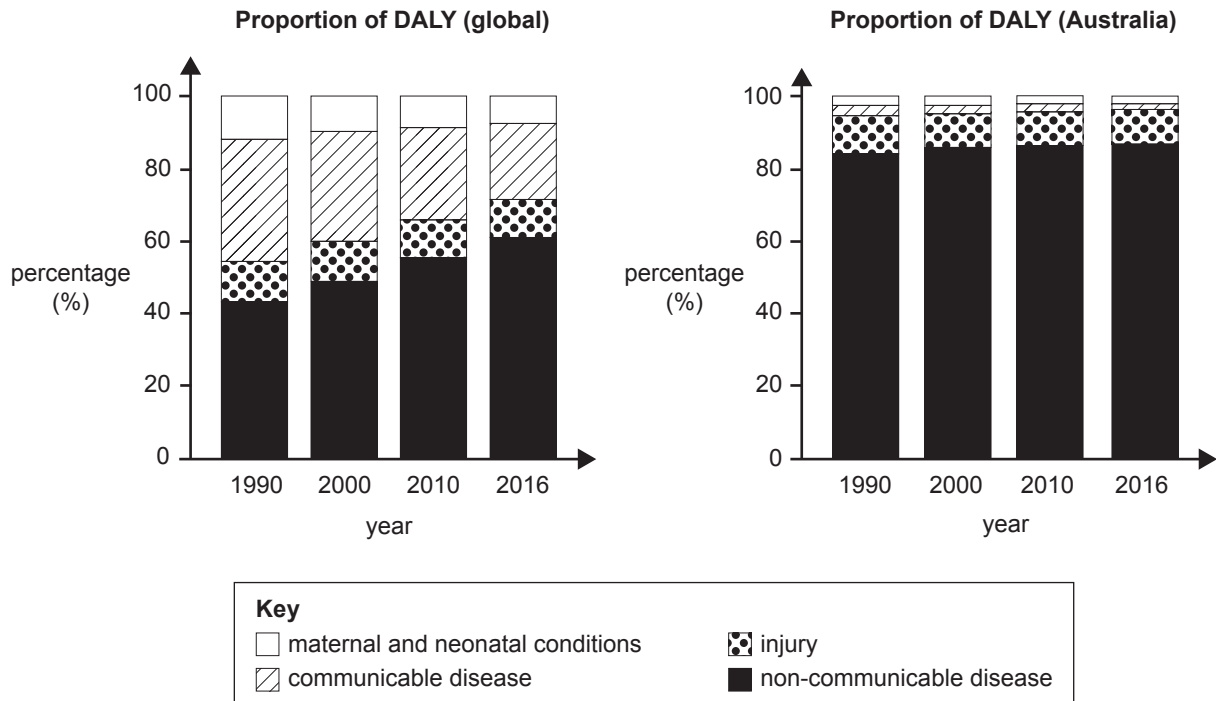
3 marks

- b.** Identify **one** example of the work of the WHO and outline how this example contributes to good health and wellbeing.

2 marks

Question 86 (11 marks)

Burden of communicable disease, injury, maternal and neonatal conditions and non-communicable disease, globally and in Australia, 1990, 2000, 2010 and 2016



Source: Australian Institute of Health and Welfare (AIHW), *Australia's Health 2018*, 'Australia's Health' series no. 16, AUS 221, AIHW, Canberra, 2018, p. 95; GBD Collaborative Network 2017, Table S3.3.1

a. Describe disability-adjusted life year (DALY) as a measure of health status. 2 marks

- b.** Use information from the graphs to compare the changes in the proportions contributed by each burden of disease to DALY, between 1990 and 2016, in Australia with the changes globally. **3 marks**

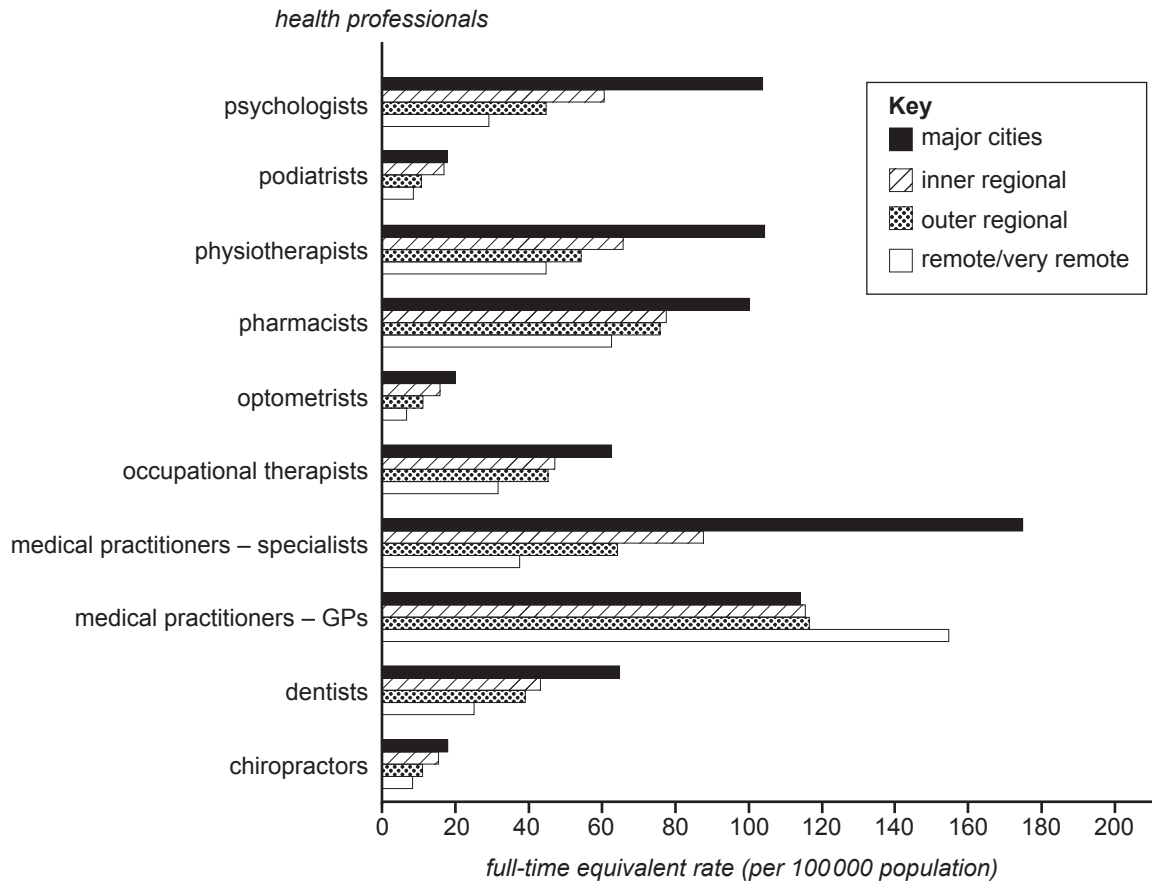
- c.** Using the graph 'Proportion of DALY (global)', select one burden of disease that has decreased in proportion from 1990 to 2016. Explain how the biomedical and social models of health may have contributed to this reduction. **4 marks**

Burden of disease _____

- d.** Outline **two** disadvantages of the biomedical model of health. **2 marks**

Question 87 (5 marks)

Employed health professionals, full-time equivalent rate, by remoteness area, 2016 (Australia)



Source: Australian Institute of Health and Welfare (AIHW), *Australia's Health 2018*, 'Australia's Health' series no. 16, AUS 221, AIHW, Canberra, 2018, p. 266; National Health Workforce Data Set, Table S5.2.7

a. Using the information in the graph, outline how the availability of health professionals varies according to remoteness.

2 marks

- b. i.** Provide **one** example of a difference in health status between people living in major cities and those living in remote/very remote areas. 1 mark

- ii.** Explain how access to health professionals could contribute to the difference in health status provided in **part b.i.** 2 marks

Question 88 (5 marks)

- a.** Describe the Pharmaceutical Benefits Scheme (PBS). 1 mark

- b.** Analyse how the PBS demonstrates sustainability and equity. 4 marks

Question 89 (9 marks)

Who is at risk of climate change?

Everyone

- Those living in poverty, as well as women, children and the elderly.
- Outdoor workers and people living with chronic medical conditions.
- Children are the most vulnerable due to long exposure to environmental risks.

Everywhere

- Those living in megacities, small island developing states and other coastal, mountainous and polar regions.
- Countries with weak health systems will be least able to prepare and respond.

Source: text from infographic from World Health Organization, www.who.int/globalchange/climate/infographics/en/

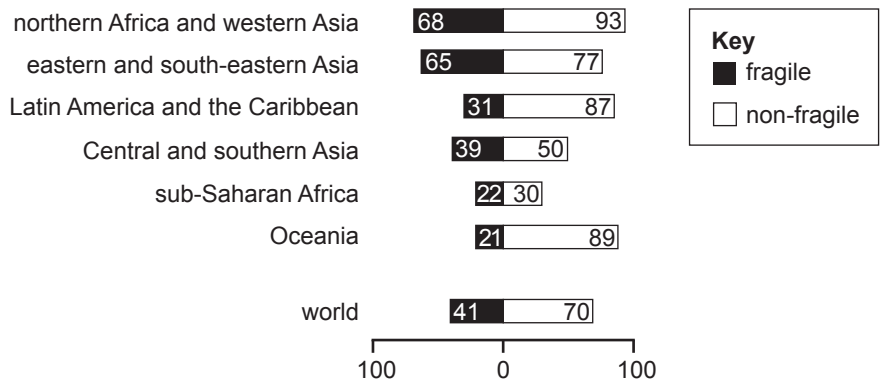
a. Using the information provided above, analyse the implications of climate change for health and wellbeing.

6 marks

- b.** Outline and justify **one** example of social action that could be taken to address climate change. 3 marks

Question 90 (7 marks)

Proportion of the population using basic sanitation services in fragile and non-fragile states, 2015 (percentage)



Source: adapted from United Nations, *The Sustainable Development Goals Report 2018*, United Nations, New York, 2018, p. 19; © 2018 United Nations

The World Bank classifies countries as fragile or non-fragile. A fragile state is a country that experiences conflict, violence and instability.

a. Describe sanitation.

1 mark

b. Using information from the graph, compare the use of basic sanitation services in fragile and non-fragile states.

2 marks

Question 91 (4 marks)

Digital technologies are increasingly being used globally to share health knowledge. The Australian Government has established My Health Record, which is a digital health record system. It contains online summaries of an individual’s health information, for example medicines they are taking and allergies. My Health Record allows doctors, hospitals and other healthcare providers to view an individual’s health information. Individuals can choose to opt out of the My Health Record system.

As of 26 May 2019:



90.1%
National My
Health Record
participation rate.



20 million
clinical documents have
been uploaded to
people’s My Health
Records.



49 million
medication prescription
and dispense records
have been uploaded.



15 900
healthcare professional
organisations are
connected, including GP
organisations, hospitals,
pharmacies and aged
care services.

Sources: infographics from My Health Record statistics, <www.myhealthrecord.gov.au/statistics>; text adapted from Australian Government, Office of the Australian Information Commissioner, <www.oaic.gov.au/privacy-law/other-legislation/my-health-records>

Analyse the implications of using digital technologies, such as My Health Record, for knowledge sharing on health and wellbeing.

Question 92 (2 marks)

One dimension of sustainability is the environmental dimension.

Describe **one** other dimension of sustainability.

Question 93 (9 marks)

Select one of the following target areas for health promotion: skin cancer, smoking or road safety.

Target area _____

a. Explain why health promotion was used to target this area. **2 marks**

Identify a health promotion program that focuses on the selected target area.

Health promotion program _____

b. Describe how the implementation of this health promotion program reflects **two** action areas of the Ottawa Charter for Health Promotion. **4 marks**

c. Evaluate this health promotion program's effectiveness in promoting health and wellbeing in Australia.

3 marks

Instructions

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

Question 94 (4 marks)

a. Using **one** example, outline why health and wellbeing is said to be dynamic.

2 marks

b. Outline **one** benefit of optimal health and wellbeing as a resource nationally.

2 marks

DO NOT WRITE IN THIS AREA

TURN OVER

Question 95 (12 marks)

Stewart is a 58-year-old father of three. Stewart and his wife own and manage a cafe. He spends his spare time with his children and close network of friends. Stewart has recently experienced depression and has had to take some time off work to focus on his condition and receive medical care. This has had significant impacts on his mental, social and emotional health and wellbeing. He has experienced depression in the past and has a number of strategies to assist with the recovery process. Stewart and his family have private health insurance (hospital and extras).

- a.** Other than treatment in a public or private hospital, list one health service that Stewart could access that is covered by Medicare and one health service that could be accessed through private health insurance. 2 marks

Medicare _____

Private health insurance _____

- b.** Identify two advantages and two disadvantages of private health insurance. 4 marks

Advantage	Disadvantage

- c.** Explain how Stewart’s current situation may have an impact on his emotional health and wellbeing. 2 marks

DO NOT WRITE IN THIS AREA

d. Explain how Stewart’s emotional health and wellbeing could have an impact on his social and spiritual health and wellbeing.

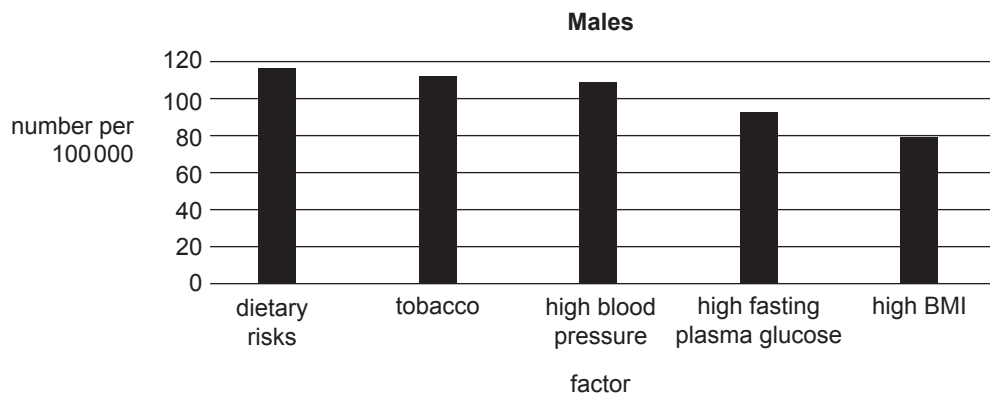
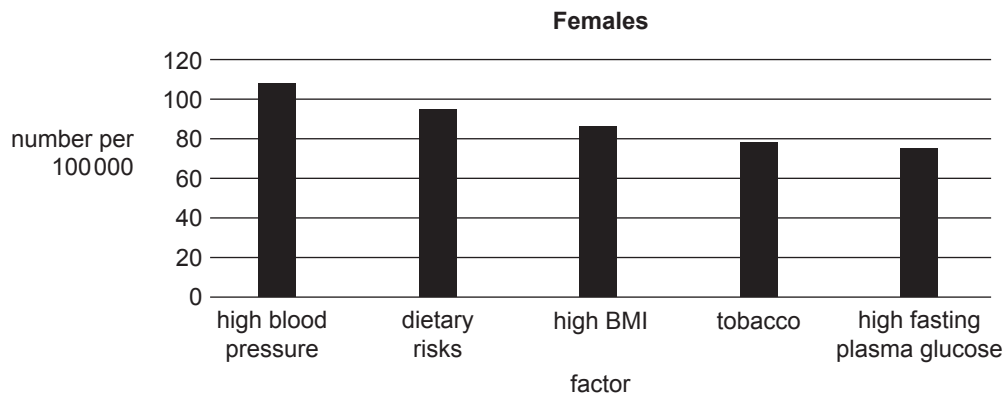
4 marks

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TURN OVER

Question 96 (9 marks)

Five leading factors contributing to deaths in Australia, 2017



Data: Institute for Health Metrics and Evaluation (IHME), <www.healthdata.org>

a. From the graphs above, select **one** example that represents a biological factor.

1 mark

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

b. List two variations in health status that exist between males and females in Australia. Explain how the differences in factors that are evident in the graphs on page 6 could contribute to these variations.

4 marks

1. _____

2. _____

c. High body mass index (BMI) and dietary risks are both major contributing factors in the deaths of males and females in Australia.

Describe two ways in which the *Australian Dietary Guidelines* could be used to bring about dietary change and decrease death rates.

4 marks

1. _____

2. _____

TURN OVER

Question 97 (6 marks)

Overall, Australian children aged 14–18:

- get 41% of their energy from discretionary foods
- get 13% of their energy from added sugars and 13% from saturated and trans fats (with the latter exceeding the 10% recommended limit)
- have an intake of sodium well above the level of adequate intake.

Source: adapted from Australian Institute of Health and Welfare, *Nutrition across the life stages*, cat. no. PHE 227, AIHW, Canberra, 2018, p. 50

a. Use two examples from the information above to explain the impact on the long-term health status of Australians.

2 marks

1. _____

2. _____

DO NOT WRITE IN THIS AREA

b. Explain two challenges that can have an impact on an individual's ability to make dietary changes.

4 marks

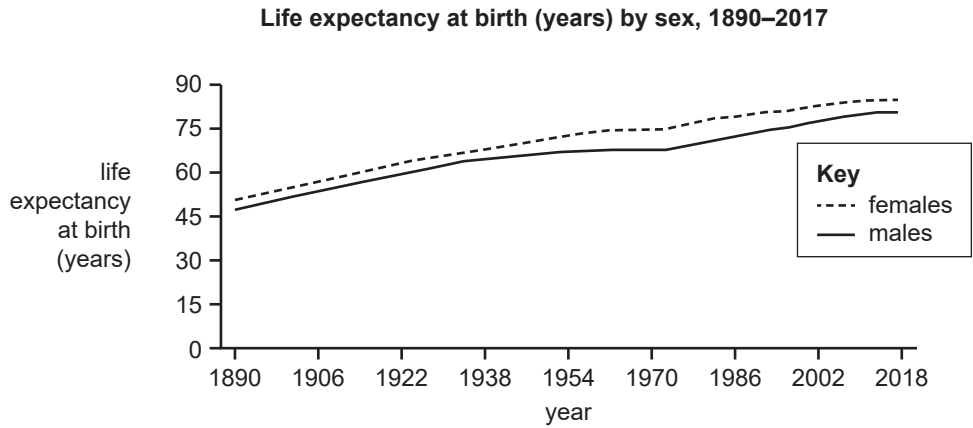
1. _____

2. _____

DO NOT WRITE IN THIS AREA

TURN OVER

Question 98 (4 marks)



Source: adapted from Australian Institute of Health and Welfare, *Deaths in Australia*, cat. no. PHE 229, AIHW, Canberra, 2019; ABS 2014a, ABS 2014b, ABS 2015, ABS 2016, ABS 2017, ABS 2018a

a. Identify two trends that are evident in the graph above. 2 marks

1. _____

2. _____

b. Select one trend from part a. and provide two reasons for this trend. 2 marks

DO NOT WRITE IN THIS AREA

Question 99 (8 marks)

The United Nations established the Sustainable Development Goals (SDGs) in 2015. These goals are underpinned by the three dimensions of sustainability, which are social, environmental and economic.

a. 'End extreme poverty' is one objective of the SDGs.

Identify two other objectives and explain why each objective is important.

4 marks

1. _____

2. _____

b. Describe social sustainability.

2 marks

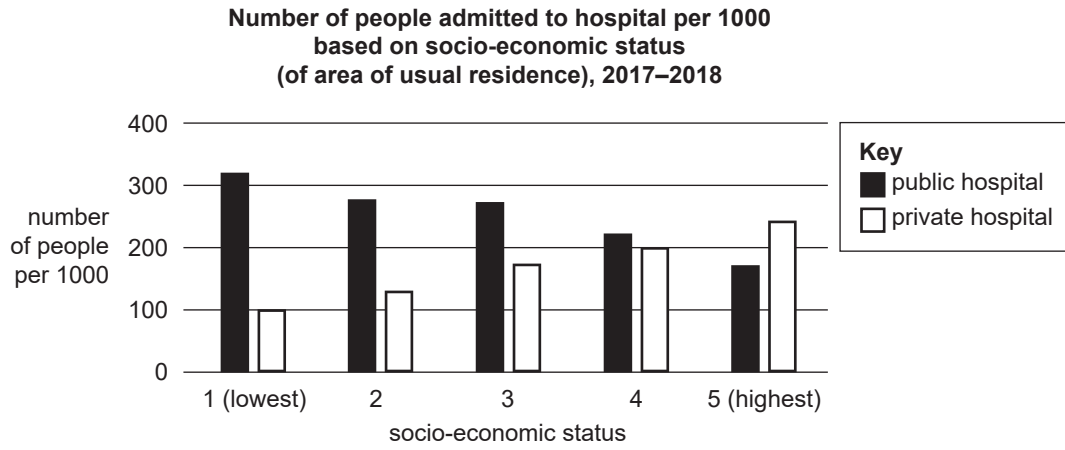
c. Explain how social sustainability underpins the achievement of the objective 'End extreme poverty'.

2 marks

DO NOT WRITE IN THIS AREA

TURN OVER

Question 100 (11 marks)



a. Outline **one** relationship between socio-economic status (SES) and the use of private and public hospitals that is evident in the graph above. 2 marks

b. Explain the benefits of private hospital use to Australia’s health system in relation to sustainability and access. 4 marks

Sustainability _____

Access _____

DO NOT WRITE IN THIS AREA

c. Identify **two** differences in health status between high and low SES groups.

2 marks

d. Identify one environmental factor and explain how it might contribute to **one** difference identified in **part c.**

3 marks

Environmental factor _____

Explanation _____

DO NOT WRITE IN THIS AREA

TURN OVER

Question 101 (6 marks)

Aboriginal and Torres Strait Islander Sexual Health [ASH program]

The WA [Western Australian] AIDS Council works to provide holistic and culturally appropriate services for and with Aboriginal and Torres Strait Islander communities in the metropolitan area and rural and remote areas of Western Australia.

The principles of the program we provide are:

- Holistic Health – Physical well-being, social, emotional and cultural well-being [for] the whole of community.
- Self determination – Aboriginal and Torres Strait Islander people involved in all aspects of health care delivery – planning and development, implementation and evaluation.
- Right for Aboriginal and Torres Strait Islander people to choose different models of health care with health programs tailored to fit the needs of the broader Aboriginal and Torres Strait Islander community groups.
- Health care services are culturally appropriate and are accessible.

We provide tailored HIV/AIDS education and prevention knowledge and training in Aboriginal and Torres Strait Islander community organisations and non-Aboriginal organisations.

We encourage and pursue joint initiatives with Aboriginal agencies and non-Aboriginal agencies with the aim of increasing capacity of ongoing appropriate interagency responses and commitment.

Source: Western Australian AIDS Council, <<https://waaids.com/item/12-ash-project.html>>

a. Explain how the ASH program can lead to improved health and wellbeing outcomes for Aboriginal and Torres Strait Islander people.

3 marks

DO NOT WRITE IN THIS AREA

- b. Identify one principle of the social model of health and explain how it is reflected in the ASH program. 3 marks

Principle

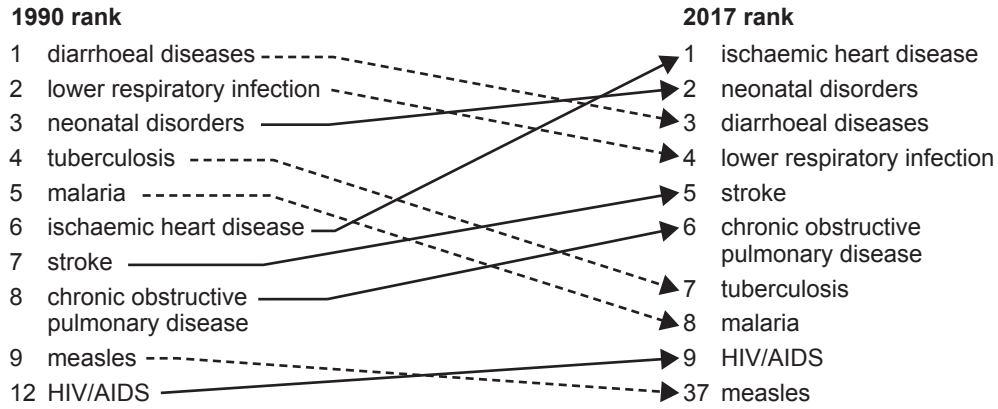
Explanation

DO NOT WRITE IN THIS AREA

TURN OVER

Question 102 (8 marks)

**Ranking of diseases in low-income countries,
both sexes, all ages, per cent of total deaths**



Source: Institute for Health Metrics and Evaluation (IHME), <www.healthdata.org>

a. Outline **two** characteristics of a low-income country.

2 marks

b. Use **one** of the diseases listed in the diagram above to explain how the global distribution and marketing of tobacco may have contributed to the change in the percentage of total deaths in low-income countries between 1990 and 2017.

2 marks

DO NOT WRITE IN THIS AREA

c. The percentage of total deaths due to tuberculosis and malaria decreased between 1990 and 2017.

Select **either** tuberculosis **or** malaria by ticking (✓) the appropriate box:

tuberculosis

malaria

Explain how the biomedical and social models of health may have led to a reduction in the percentage of total deaths caused by your selected disease between 1990 and 2017.

4 marks

Biomedical _____

Social _____

DO NOT WRITE IN THIS AREA

TURN OVER

Question 103 (11 marks)

Country	Life expectancy at birth 2018	Under-five mortality rate (deaths per 1000 live births)	Maternal mortality ratio 2017	Access to basic drinking water services (%) 2017	Access to basic sanitation services (%) 2017	Total fertility (live births per woman) 2018	GNI per capita (US\$) 2018
Afghanistan	64	62	638	67	43	4.5	550
Australia	83	4	6	100	100	1.8	53 250
Mexico	75	13	33	99	91	2.1	9180
Italy	83	3	2	99	99	1.3	33 770
Fiji	67	26	34	94	95	2.8	5860

Sources: UNICEF, *The State of the World's Children 2019: Children, food and nutrition: Growing well in a changing world*, UNICEF, New York, 2019, pp. 192, 193, 196, 197, 200, 201, 240 and 241 (all except GNI per capita); The World Bank, GNI per capita, Atlas method (current US\$), <<https://data.worldbank.org/indicator/NY.GNP.PCAP.CD>>

- a. Identify one country that would be considered a middle-income country and use data from the table above to justify your response.

2 marks

Country _____

Justification _____

- b. Using data from the table above, discuss how access to basic drinking water and basic sanitation services could have an impact on health status.

3 marks

DO NOT WRITE IN THIS AREA

c. Describe how poverty and inequality and discrimination based on sex could have an impact on health status and health and wellbeing.

6 marks

Poverty _____

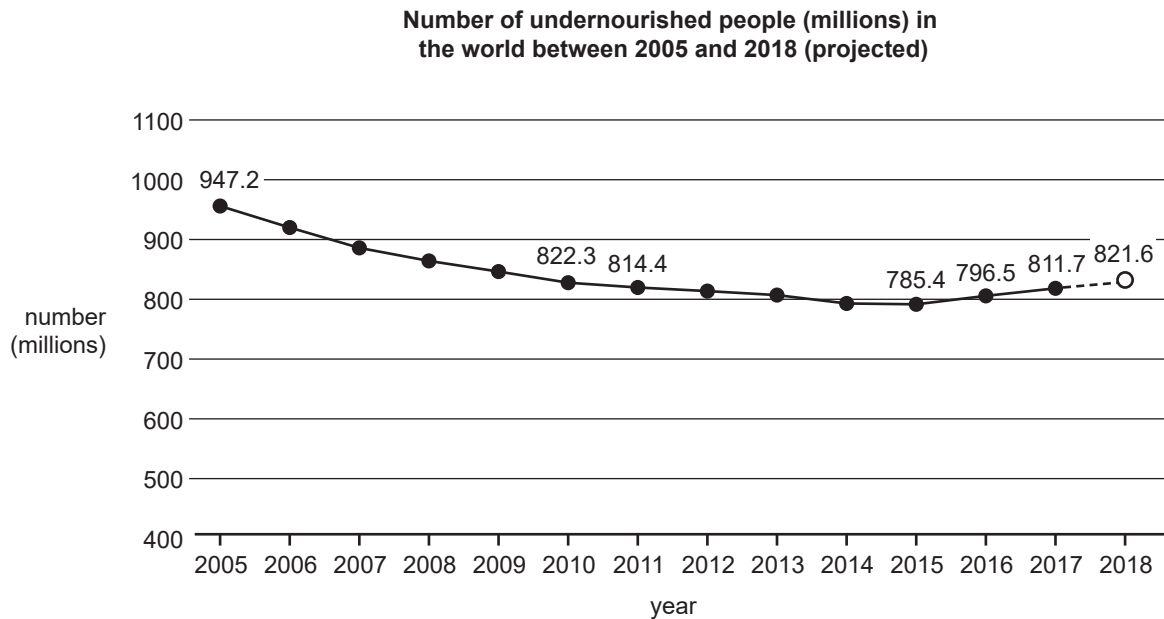
Inequality and discrimination based on sex _____

DO NOT WRITE IN THIS AREA

TURN OVER

Question 104 (8 marks)

Consider the following three sources relating to global trends and other factors.

Source 1

Source: adapted from FAO, IFAD, UNICEF, WFP and WHO, *The State of Food Security and Nutrition in the World 2019: Safeguarding against economic slowdowns and downturns*, Rome, FAO, 2019, p. 6; licence CC BY-NC-SA 3.0 IGO

Source 2

In Yemen, home to Moteab and his family, protracted conflict ... turned daily life into a 'living hell'. His father's job, transporting goods in a wheelbarrow, provided the family with the bare minimum of food – bread for breakfast, vegetables, usually potatoes, for lunch and anything left over for dinner.

By the time Moteab turned 2 years old, the combination of poverty and protracted conflict left him in a struggle for his life ... After [Moteab had suffered] seven months of repeated illnesses with vomiting, diarrhoea and weight loss, his mother was directed to a free health centre in Abs, where [Moteab] was diagnosed with SAM [severe acute malnutrition].

Moteab is just one of the 400 000 children in Yemen who suffered from SAM in 2018.

Source: UNICEF, *The State of the World's Children 2019: Children, food and nutrition: Growing well in a changing world*, UNICEF, New York, 2019, p. 116

Source 3

What do young people think about healthy eating?

‘We lack money here to stay healthy ... Our family is unable to find good jobs.’ *Girl, 16, India*

‘Meat is not available. We have money to buy meat, but the place is too far away.’ *Girl, 14, Ghana*

‘Unhealthy food is easier to come by.’ *Boy, 17, USA*

‘If I work ... to have money, then I will buy food for my family.’ *Boy, 13, the Sudan*

Source: UNICEF, *The State of the World's Children 2019: Children, food and nutrition: Growing well in a changing world*, UNICEF, New York, 2019, pp. 26 and 27

Use information from all three sources and your own knowledge to discuss:

- how global trends and other factors have an impact on achieving SDG 2 ‘Zero hunger’
- the relationship between SDG 2 and **two** features of SDG 3 ‘Ensure healthy lives and promote wellbeing for all at all ages’.

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

TURN OVER

Question 105 (7 marks)

Over a million Rohingya refugees have fled violence in Myanmar in successive waves of displacement since the early 1990s ...

The Rohingya are a stateless Muslim minority in Myanmar. The latest exodus began on 25 August 2017, when violence broke out in Myanmar’s Rakhine State, driving more than 742 000 to seek refuge in Bangladesh. Most arrived in the first three months of the crisis ... The vast majority reaching Bangladesh are women and children, and more than 40 per cent are under age 12. Many others are elderly people requiring additional aid and protection. They have nothing and need everything.

Source: UNHCR, The UN Refugee Agency, ‘Rohingya emergency’, <www.unhcr.org/en-au/rohingya-emergency.html>

a. According to the Ottawa Charter for Health Promotion, peace and shelter are prerequisites for health.

Explain why each of these prerequisites must be available for the Rohingya people to improve or maintain their health and wellbeing.

4 marks

Peace _____

Shelter _____

DO NOT WRITE IN THIS AREA

- b. Explain the implications of mass migration, some of which are evident in the information on page 24, for health and wellbeing.

3 marks

DO NOT WRITE IN THIS AREA

TURN OVER

Question 106 (6 marks)

Worldwide more than 140 000 people died from measles in 2018, according to new estimates from the World Health Organization (WHO) and the United States Centers for Diseases Control and Prevention (CDC). These deaths occurred as measles cases surged globally, amidst devastating outbreaks in all regions.

Most deaths were among children under 5 years of age ...

...

M&RI [Measles and Rubella Initiative] is a global partnership founded by the American Red Cross, the CDC, the United Nations Foundation, UNICEF and WHO, that is committed to achieving and maintaining a world without measles [and] rubella ... Founded in 2001, the Initiative has helped vaccinate over 2.9 billion children and save over 21 million lives by increasing vaccination coverage, improving disease response, monitoring and evaluation, and building public confidence and demand for immunisation.

Source: World Health Organization, 'More than 140 000 die from measles as cases surge worldwide', joint news release, 5 December 2019

a. Identify and describe **one** WHO strategic priority that is reflected in the information above. Use **one** example from the information above to support your response.

3 marks

b. Explain how the Measles and Rubella Initiative could promote human development.

3 marks

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A series of 25 horizontal lines for writing.

