# 8 Comparing health status and burden of disease across countries

Unit	4	Health and wellbeing in a global context
Area of Study	1	Health and wellbeing in a global context
Торіс	8	Comparing health status and burden of disease across countries
Subtopic	8.2	Economic characteristics of high-, middle- and low-income countries

# Summary

ow- and middle-income countries	High-income countries
<ul> <li>High to very high levels of poverty</li> <li>(living on less than US\$1.90 per day)</li> <li>Limited range of industries — usually</li> <li>primary-production based</li> <li>Limited opportunities for global trade</li> <li>Low average incomes</li> </ul>	<ul> <li>Low levels of poverty</li> <li>Wide range of industries</li> <li>Opportunities for global trade</li> <li>High average incomes</li> </ul>

# My notes

Unit 4	$\geq$	AOS 1	>	Topic 8	Subtopic 8.2 Economic characteristics of high-, middle- and lo	w-income
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### Past VCAA exam questions

Source: Adapted from VCAA 2014 Health & Human Development Exam, Q8

### **Question 1**

Low- and middle-income countries often share a number of social, environmental and economic characteristics.

Identify any two examples of characteristics common to low- and/or middle-income countries. 2 marks



Source: Adapted from VCAA 2014 Health & Human Development Exam, Q8

### **Question 2**

In 2000, the United Nations (UN) set out the Millenium Development Goals as a framework for development. The target date for meeting these goals is 2015. One of the United Nations' millenium goals is to 'promote gender equality and empower women'. AusAID has been working in partnership with an agency called Building Resources Across Communities (BRAC) in Bangladesh whose target group is very poor women. Its main goal is to find sustainable living options for the very poor. Read the following case and then answer the questions below.

Suva Rani did not complete year three at primary school. At 15 she married. She and her husband often went hungry when her husband, a day labourer, was out of work. Yet Suva gave birth to four children. This brought the couple much joy but also worsened their poverty.

In 2002, along with other poor women, Suva enrolled in an AusAID-funded BRAC microfinance program. She was shown how to manage a loan of about \$80 to start up a rice-husking business. She worked hard to make her business a success and was very careful to make regular repayments on her loan. She was able to take out a second loan for a cow-rearing business and sold milk in the local markets. She was then able to save enough money to rent a piece of land for her husband to cultivate and finally saved enough money to build a well and install a sanitary toilet in her house.

Today she stands proudly as a self-reliant woman. Each of her children goes to school, her family is healthy and well-nourished. They can all look toward a bright future.

Adapted from: A break from BRAC, Focus, Australian Agency for International Development (AusAID), Canberra, Sept.-Dec. 2007, pp. 27–28

Outline two benefits to health and wellbeing **and/or** human development of introducing the BRAC project in a developing country like Bangladesh. **2 marks** 

Subtopic 8.2 Economic characteristics of high-, middle- and low-income

### Exam practice questions

AOS 1

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

Topic 8

### **Question 3**

Economic, social and environmental characteristics are used to classify low-, middle- and high-income countries.

Economic characteristics relate to

A. accessibility of food, water and sanitation, housing and infrastructure levels.

1 mark

- **B.** the level of education, employment, health care and gender equality of a country.
- C. the financial or economic state of a country.

**D.** All of the above

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

### **Question 4**

Which of the following is not an example of an economic characteristic used to classify low-, middle- and high-income countries? **1 mark** 

- A. access to sanitation
- B. levels of poverty
- **C.** range of industries
- **D.** global trade opportunities

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

### **Question 5**

List two economic characteristics of a high-income country.

2 marks

Unit 4		AOS 1	>	Topic 8	Subtopic 8.2 Economic characteristics of high-, middle- and low-income
Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question					

### **Question 6**

Identify two economic characteristics of a low- or middle-income country.

2 marks

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

### **Question 7**

In the last decade, Country X has shown the following improvements:

- access to sanitation has improved, particularly in urban areas
- birth rates have steadily decreased
- growth of industries, particularly in the electronics and communication fields
- the introduction of social housing and a universal health scheme has been established
- increase in living standards, with very few families living on less than US\$1.90 per day
- construction and redevelopment of major roads and rail systems.

From the information above, identify two economic characteristics relevant to Country X. 2 marks

### Revision and past VCAA exam question booklet

Unit	4	Health and human development in a global context
Area of Study	1	Health and wellbeing in a global context
Торіс	8	Comparing health status and burden of disease across countries
Subtopic	8.3	Social and environmental characteristics of high-, middle- and low-income countries

# Summary

Low- and middle-income countries	High-income countries
Low levels of employment	High levels of employment
<ul> <li>Low levels of education</li> </ul>	<ul> <li>High levels of education</li> </ul>
<ul> <li>Low levels of gender equality</li> </ul>	<ul> <li>High levels of gender equality</li> </ul>
<ul> <li>High birth rates</li> </ul>	<ul> <li>Low birth rates</li> </ul>
<ul> <li>Unstable governments and weak/ corrupt legal systems</li> </ul>	<ul><li>Strong political and legal systems</li><li>Well established social protection</li></ul>
<ul> <li>Lack of established social protection systems</li> </ul>	systems

 Environmental characteristics relate to accessibility of food, water and sanitation, housing and infrastructure levels.

Low- and middle-income countries	High-income countries
<ul> <li>Poor access to nutritious and adequate</li></ul>	<ul> <li>Good access to high quality and</li></ul>
food supply	adequate food supply
<ul> <li>Poor access to safe water and adequate</li></ul>	<ul> <li>Good access to safe water and</li></ul>
sanitation	sanitation
<ul> <li>Lack of adequate housing — poor ventilation, lack of heating and cooling</li> <li>Poorly developed infrastructure</li> </ul>	<ul> <li>Good access to adequate housing</li> <li>Well developed infrastructure — roads, electricity, communication systems</li> </ul>

# My notes

Unit 4	AOS 1	>	Topic 8	Subtopic 8.3 Social and environmental characteristics	
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### Past VCAA exam questions

Source: VCAA 2016, Health and Human Development Exam, Q12b

### Question 1

The World Health Organization (WHO) is part of the UN and was established in 1948. It works to promote global health and sustainable human development. One WHO initiative is the development of the Framework Convention on Tobacco Control. This framework seeks to reduce smoking rates worldwide. Select one of the UN's Sustainable Development Goals and discuss how the Framework Convention on Tobacco Control could help achieve this goal by 2030. **3 marks** 

### Exam practice questions

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

#### **Question 2**

Economic, social and environmental characteristics are used to classify low-, middle- and high-income countries.

Social characteristics relate to

1 mark

- A. accessibility of food, water and sanitation, housing and infrastructure levels.
- **B.** the level of education, employment, health care and gender equality of a country.
- **C.** the financial or economic state of a country.
- **D.** All of the above

Unit 4	AOS 1	Topic 8	Subtonic 8 3 Soc	ial and environment	al characteristics	
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	caranda (John	Wiley & Sons	s Australia, Ltd), Prac	tice VCE Questior	ו	
high-income			nple of a social cha	aracteristic used	to classify low-, 1	middle- and <b>1 mark</b>
<b>B.</b> birth rate <b>C.</b> political	S					
<b>D.</b> social pro	otection syste	ems				
Source: la	icaranda ( lohn	Wiley & Sons	s Australia, Ltd), Prac	tice VCE Question	1	
	caranua (John	Wiley & Sons	Australia, Liuj, Frac		1	
Question 4 List two soc	ial characteri	stics of a hig	h-income country.			2 marks
Source: Ja	caranda (John	Wiley & Sons	s Australia, Ltd), Prac	tice VCE Questior	1	
<b>Question 5</b> Identify two	social charac	cteristics of a	a low- or middle-ir	come country.		2 marks

4	AOS 1	Topic 8	Subtopic 8.3 Social and environmental characteristics
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Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

#### **Question 6**

In the last decade, Country X has shown the following improvements:

- access to sanitation has improved, particularly in urban areas
- birth rates have steadily decreased
- growth of industries, particularly in the electronics and communication fields
- the introduction of social housing and a universal health scheme has been established
- increase in living standards, with very few families living on less than US\$1.90 per day
- construction and redevelopment of major roads and rail systems.

From the information above, identify two social characteristics relevant to Country X.

2 marks

1 mark

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

#### **Question 7**

Economic, social and environmental characteristics are used to classify low-, middle- and high-income countries.

Environmental characteristics relate to

- A. accessibility of food, water and sanitation, housing and infrastructure levels.
- B. the level of education, employment, health care and gender equality of a country.
- C. the financial or economic state of a country.
- **D.** All of the above

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

### **Question 8**

Which of the following is not an example of an environmental characteristic used to classify low-, middleand high-income countries? **1 mark** 

- A. water and sanitation
- **B.** birth rates
- C. infrastructure
- **D.** housing

### Revision and past VCAA exam question booklet

Unit 4 AOS 1 Topic 8 Subtopic 8.3 Social and environmental characteristics	
Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question	
Question 9 List two environmental characteristics of a high-income country.	2 marks
Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question	
Question 10 Identify two environmental characteristics of a low- or middle-income country.	2 marks
Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question	
Question 11	
In the last decade, Country X has shown the following improvements: • access to sanitation has improved, particularly in urban areas • birth rates have steadily decreased	
<ul> <li>growth of industries, particularly in the electronics and communication fields</li> <li>the introduction of social housing and a universal health scheme has been established</li> <li>increase in living standards, with very few families living on less than US\$1.90 per day</li> <li>construction and redevelopment of major roads and rail systems.</li> </ul>	
	2 marks

### Revision and past VCAA exam question booklet

Unit	4	Health and human development in a global context
Area of Study	1	Health and wellbeing in a global context
Торіс	8	Comparing health status and burden of disease across countries
Subtopic	8.4	Similarities and differences in health status and burden of disease in low-, middle- and high-income countries

# Summary

### Similarities in health status:

- Low-, middle- and high-income countries have all seen increases in life expectancy since 1960.
- Morbidity from cancer, cardiovascular disease and type 2 diabetes are common in low-, middle- and high-income countries.

### **Differences in health status:**

- Under-5 mortality is significantly higher in low- and middle-income countries than in high-income countries.
- Communicable diseases (e.g. malaria, measles, HIV/AIDS and respiratory diseases such as pneumonia) are higher in low- and middle-income countries compared to high-income countries.
- Maternal mortality rates are higher in low- and middle-income countries compared to high-income countries.

	Life expectancy at birth (years)	U5MR (per 1000 live births)	Maternal mortality (per 100,000 live births)
Australia	83	4	6
<b>High-income</b> (e.g. Japan)	84	3	6
<b>Upper middle-income</b> (e.g. China)	75	13	32
Lower middle-income (e.g. Papua New Guinea)	62	61	220
Low-income (e.g. Mali)	57	123	550

Source: http://www.who.int/gho/countries/jpn/country\_profiles/en/

# My notes

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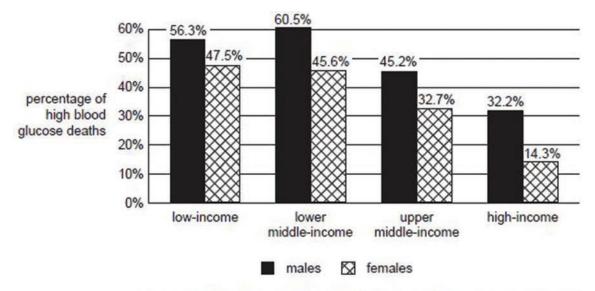
Unit 4		AOS 1	>	Topic 8	>	Subtopic 8.4 Similarities and differences in health status and	burden of disease
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### Past VCAA exam questions

Source: VCAA 2017, Health and Human Development Exam, Q9a

### **Question 1**

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

In which country income group is the percentage of high blood glucose deaths the highest for males? **1 mark** 

angle Subtopic 8.4 Similarities and differences in health status and burden of disease

Source: VCAA 2017, Physics Exam, Section B, Q4b

Topic 8

AOS 1

### **Question 2**

From the table below, list two major differences in mortality rate between Australia, Sudan and Indonesia.

2 marks

### Mortality rates for selected low-, middle- and high-income countries, 2015

Country	Adult mortality - probability of dying between ages 15 and 60 (per 1000)	Life expectancy at birth	Maternal mortality (per 100,000)	Under-5 mortality (per 1000)
Sudan (low in come country)	225	63	360	77
Indonesia (middle income country)	176	71	190	29
Australia (high income country)	59	83	6	4

Adapted from www.who.int/whosis/en/index.html

angle Subtopic 8.4 Similarities and differences in health status and burden of disease

Source: VCAA 2015, Health and Human Development Exam, Q9a

Topic 8

### **Question 3**

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 (deats 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;

AOS 1

‡World Health Organization, 'Global Health Observatory Data Repository',

\*\*Australia 2009, Turkey 2008, Chad 2010

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

AOS 1 Topic 8

Subtopic 8.4 Similarities and differences in health status and burden of disease

### Exam practice questions

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

### **Question 4**

Give two reasons why the under-5 mortality rate in Australia is low.

2 marks

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

### **Question 5**

- A health status difference between low/middle-income countries and high-income countries is **1 mark**
- A. low- and middle-income countries have a lower under-5 mortality rate than high-income countries.
- **B.** low- and middle-income countries have a higher life expectancy.
- **C.** low- and middle-income countries have higher morbidity and mortality rates from infectious and parasitic disease than high-income countries.
- **D.** low- and middle-income countries have lower rates of communicable diseases than high-income countries.

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

### **Question 6**

A similarity in health status between low/middle- and high-income countries is

1 mark

- A. they have all seen an increase in life expectancy in the past four decades.
- **B.** they all experience high mortality from measles and malaria.
- C. they all experience low rates of HIV/AIDS.
- D. they all have higher communicable than non-communicable disease rates.

AOS 1

angle Subtopic 8.4 Similarities and differences in health status and burden of disease

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

Topic 8

### **Question 7**

### Comparison of key indicators for high-, middle- and low-income countries

Country	Income classification	Life expectancy at birth (years) (2015)	Adult mortality rate per 1000 (2012)	Under-5 mortality rate per 1000 (2015)
Australia	High-income country	83	59	4
China	Upper middle income country	75	85	13
Papua New Guinea	Lower middle income country	62	275	61
Zimbabwe	Lower middle income country	58	336	89

Source: Adapted from www.who.int.

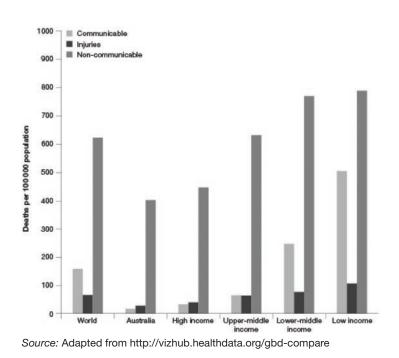
Using data from the table, describe two differences in health status between a low-income country and a high-income country. **4 marks** 

Unit 4	>	AOS 1	>	Topic 8	Subtopic 8.4 Similarities and differences in health status and burden of disease

### Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

### **Question 8**

Mortality rates for selected conditions — globally, in Australia and in the World Bank income groups, 2015



Identify two similarities in mortality rates between low-, middle- and high-income countries. **2 marks** 

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AOS 1

angle Subtopic 8.4 Similarities and differences in health status and burden of disease

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

Topic 8

### **Question 9**

Health status comparisons between countries (2015)							
	Life expectancy at birth (years)	U5MR (per 1000 live births)	Maternal mortality (per 100,000 live births)				
Australia	83	4	6				
High-income (Japan)	84	3	6				
Upper middle income (China)	75	13	32				
Lower middle income (Papua New Guinea)	62	61	220				
Low-income (Mali)	57	123	550				

What is the relationship between life expectancy and a country's income classification, evident in the table above? **1 mark** 

A. As life expectancy decreases, the income classification of a country increases.

**B.** As life expectancy increases, the income classification of a country also increases.

C. As life expectancy increases, the income classification of a country remains the same.

**D.** There is no relationship between life expectancy and a country's income classification.

AOS 1

angle Subtopic 8.4 Similarities and differences in health status and burden of disease

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

Topic 8

#### **Question 10**

Health status comparisons between countries (2015)							
	Life expectancy at birth (years)	U5MR (per 1000 live births)	Maternal mortality (per 100,000 live births)				
Australia	83	4	6				
High-income (Japan)	84	3	6				
Upper middle income (China)	75	13	32				
Lower middle income (Papua New Guinea)	62	61	220				
Low-income (Mali)	57	123	550				

What is the relationship between the income classification of a country and maternal mortality, evident in the above table? **1 mark** 

A. Maternal mortality increases as a country's income classification lowers.

**B.** Maternal mortality increases as a country's income classification becomes higher.

**C.** Maternal mortality remains the same as a country's income classification lowers.

**D.** There is no relationship between maternal mortality and income classification of a country.

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angle Subtopic 8.4 Similarities and differences in health status and burden of disease

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

Topic 8

### Question 11

Health status comparisons between countries (2015)							
	Life expectancy at birth (years)	U5MR (per 1000 live births)	Maternal mortality (per 100,000 live births)				
Australia	83	4	6				
High-income (Japan)	84	3	6				
Upper middle income (China)	75	13	32				
Lower middle income (Papua New Guinea)	62	61	220				
Low-income (Mali)	57	123	550				

Using data from the table, what conclusion can you draw about the health status of Australia compared to a middle-income country? **2 marks** 

AOS 1

Subtopic 8.4 Similarities and differences in health status and burden of disease

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

Topic 8

### **Question 12**

Health status comparisons between countries (2015)							
	Life expectancy at birth (years)	U5MR (per 1000 live births)	Maternal mortality (per 100,000 live births)				
Australia	83	4	6				
High-income (Japan)	84	3	6				
Upper middle income (China)	75	13	32				
Lower middle income (Papua New Guinea)	62	61	220				
Low-income (Mali)	57	123	550				

Using data from the table, outline the relationship between under-5 mortality and a country's income classification. 2 marks

### Revision and past VCAA exam question booklet

Unit	4	Health and human development in a global context
Area of Study	1	Health and wellbeing in a global context
Торіс	8	Comparing health status and burden of disease across countries
Subtopic	8.5	Access to safe water and sanitation

# Summary

- Access to safe water and sanitation is limited in low- and middle-income countries.
- In 2017, approximately 663 million people lacked access to safe water (clean drinking water). This can:
  - cause illnesses such as diarrhoea and cholera, and lead to malnutrition. Children are particularly vulnerable to diarrhoea, which causes 1.1 million preventable deaths per year in low- and middle-income countries
  - contribute to missed school days each year, leaving children without an education and the potential to earn a decent standard of living
  - > limit the opportunities for women to work if much of their day is spent collecting water.
- Approximately 1 in 3 people lack access to basic sanitation (access to toilets) and many defecate in the open, which contributes to contaminated water supplies.

# My notes

	Unit 4	$\geq$	AOS 1	>	Topic 8	Subtopic 8.5 Access to safe water and sanitation	
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### Past VCAA exam questions

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Source: VCAA 2017, Health and Human Development Exam, Q15a

### **Question 1**

Describe what is meant by 'safe water and sanitation'.

Source: VCAA 2010 Health and Human Development Exam, Section B, Q4a

### **Question 2**

In developing regions most of the burden of collecting drinking water falls on women and girls. Explain how this burden may impact on human development. 2 marks

### Exam practice questions

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

### Question 3

A lack of safe water can lead to

- A. diarrhoeal disease.
- **B.** cholera.
- **C.** dysentery.
- **D.** All of the above

1 mark

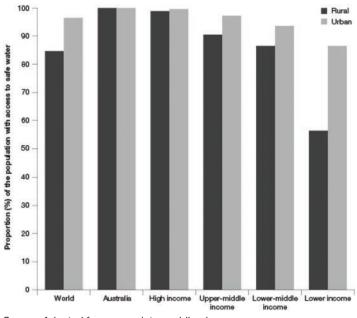
2 marks



Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

### **Question 4**

Proportion of urban and rural populations with access to safe water (per cent), 2015





The relationship between income classification of a country and access to safe water is **1 mark** 

A. as the income classification of a country decreases, access to safe water increases.

B. as the income classification of a country decreases, access to safe water remains unchanged.

C. as the income classification of a country decreases, access to safe water decreases.

D. There is no relationship between income classification and safe water.

AOS 1

### Topic 8 Subtopic 8.5 Access to safe water and sanitation

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

#### **Question 5**

Comparison of key indicators for high-, middle- and low-income countries, 2015

Income classification	Life expectancy at birth (years)	Maternal mortality rate per 100 000	Under-5 mortality rate per 1000	Population with access to safe water (%)	Population with access to adequate sanitation (%)
High-income countries	81	10	6	100	99
Upper middle income countries	75	54	19	95	80
Lower middle income countries	68	251	53	89	52
Low-income countries	62	496	76	66	28

Source: Adapted from http://data.worldbank.org/

Using data from the table, explain how access to adequate sanitation could contribute to differences in health status between high- and low-income countries. **3 marks** 

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

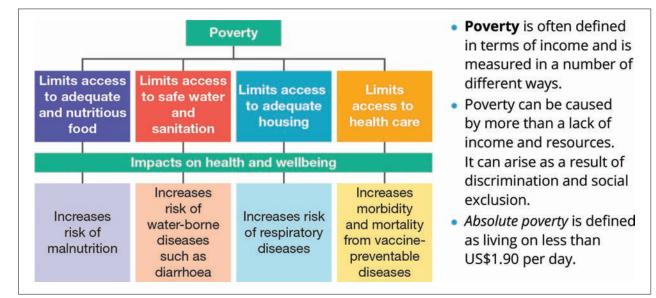
### **Question 6**

Outline two reasons why a lack of access to safe water may impact on the ability of children to attend school. 2 marks

### Revision and past VCAA exam question booklet

Unit	4	Health and human development in a global context
Area of Study	1	Health and wellbeing in a global context
Торіс	8	Comparing health status and burden of disease across countries
Subtopic	8.6	Poverty

# Summary



# My notes



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### Past VCAA exam questions

Source: VCAA 2017, Health and Human Development Exam, Q1d

### Question 1

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 moratality 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

Identify and explain one possible reason for the difference in tuberculosis (TB) incidence between Australia and Vietnam. **3 marks** 

Unit 4	AOS 1	>	Topic 8	Subtopic 8.6 Poverty

Source: VCAA 2011, Health and Human Development Exam, Section A, Q5

### **Question 2**

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. **2 marks** 

Source: Adapted from VCAA 2005 Health and Human Development Exam, Q3ii

### **Question 3**

Infectious and parasitic diseases in the World Health Organization Africa Region (which includes Zimbabwe) contribute 56% of the DALYs. In the World Health Organization Western Pacific Region (which includes Australia) the relevant figure is 1.9%.

Source: Adapted from Annex Table 3, Burden of Disease in DALYs by cause, sex and mortality stratum in WHO regions, estimates for 2002 in WHO, World Health Report 2003, WHO, Geneva

Explain how **low levels of income** may cause the differences in the contribution of infectious and parasitic diseases to total DALYs in Zimbabwe and Australia. **2 marks** 

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Unit 4
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Subtopic 8.6 Poverty

### Exam practice questions

AOS 1

Topic 8

Source: Adapted from Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

### **Question 4**

### Comparison of key indicators for high-, middle- and low-income countries

Country	Income classification	Life expectancy at birth (years) (2015)	Gross national income per capita (PPP int. \$) (2015)	Adult mortality rate per 1000 (2012)	Government expenditure on health per capita US\$ (2014)	Under-5 mortality rate per 1000 (2015)
Australia	High- income country	83	45320	59	6031	4
China	Upper middle income country	75	14320	85	85	13
Papua New Guinea	Lower middle income country	62	2800	275	92	61
Zimbabwe	Low- income country	58	1710	336	58	89

www.who.int/whosis/en/index.html and http://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD

Using information in the table, what is the relationship between income and life expectancy in the above table? **2 marks** 

AOS 1

Topic 8 > Subtopic 8.6 Poverty

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

### Question 5

Poverty and education are closely linked. Explain one way a lack of education can contribute to poverty.

2 marks

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

### **Question 6**

Read the following text.

In 2005, Mozambique signed a new law that gave women equal rights as members of a household. Women finally received the legal right to divorce, create pre-nuptial agreements and inherit property.

The Family Law legally redefined the status of women and overhauled marriage laws.

The law also limited marriage to women of 18 years of age and older. Men were now no longer the defacto head of household, and women are able to work outside the home without acquiring permission and can buy and manage financial assets.

### Source: http://endpoverty2015.org/goals/genderequity

Describe how the above changes may improve the health of Mozambique's women.

2 marks

Unit	4	Health and human development in a global context
Area of Study	1	Health and wellbeing in a global context
Торіс	8	Comparing health status and burden of disease across countries
Subtopic	8.7	Inequality and discrimination

# Summary

• **Inequality and discrimination** occur when people are treated differently because of their race, religion, sex, sexual orientation or gender identity.

Race	Indigenous communities and ethnic minorities have lower life expectancy and have higher rates of ill-health and disability.
Religion	Religious discrimination can increase rates of anxiety, depression, stress and decreased life satisfaction.
Sex	Globally, sex inequalities have a greater impact on women's health than men's health. Women are often last fed, have limited access to education and often have little power in decision making.
Sexual orientation	Discrimination includes refusal of job, education and healthcare opportunities, sexual and physical assaults, and in some countries criminal proceedings.
Gender identity	Discrimination can lead to high rates of physical and mental health problems, including suicide and self-harm.

# My notes

Unit 4		AOS 1	Topic 8	Subtopic 8.7 Inequality and discrimination	
					online <sup>≩</sup>
To answer of your learnC	•			e <b>immediate feedback</b> and <b>sample responses</b> for every qu <b>u</b> .	lestion, go to

### Past VCAA exam questions

Source: VCAA 2017, Health and Human Development Exam, Q8b

### **Question 1**

In many developing countries, women are less likely than men to be fully employed. Identify two reasons why this might occur. **2 marks** 

Source: VCAA 2018, Health and Human Development Exam, Q9

### Question 2

**a.** Explain the term 'discrimination'.

2 marks

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

2 marks

Unit 4	AOS 1	Topic 8	Subtopic 8.7 Inequality and discrimination

Source: Adapted from VCAA 2007 Health and Human Development Exam, Q7d

### **Question 3**

The *World Food Programme* (WFP) is the food aid part of the United Nations. Food aid is one way to promote food security, which is defined as access of all people at all times to the food needed for an active and healthy life. One of the core policies for the *World Food Programme is* 

• to improve the nutrition and quality of life of the most vulnerable people at critical times in their lives. In January 2002, the *World Food Programme* and the government of Sudan launched a five-year program to improve maternal and child nutrition. The *World Food Programme* recognises that women are the first and fastest solution to reducing poor nutrition. Experience shows that in the hands of women, food aid is far more likely to reach children. Seven out of ten of the world's hungry are women and girls. The *World Food Programme* seeks to give over half its food aid to females.

Source: Adapted from: World Health Organization, World Food Programme

http://www.wfp.org/english. Accessed March 2007

Describe how inequality and discrimination may impact on the access to food by women in Sudan. 2 marks

### Exam practice questions

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

### **Question 4**

Explain how inequality and discrimination can impact on the health status of girls in a low- or middle-income country.

2 marks

Source: Jaca	randa (John Wi	ley & Sons A	Australia, Ltd), Practice VCE Question
Question 5			
Indigenous cor	This health st		inorities have lower life expectancy and higher rates of ill-health ence is an example of what form of inequality and <b>1 mark</b>
<b>A.</b> race	•		
<b>B.</b> sex			
C. religion			
<b>D.</b> gender iden	tity/sexual or	ientation	

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

### Question 6

Inequality and discrimination can contribute to a range of negative health outcomes including **1 mark A.** higher rates of depression and anxiety.

**B.** lower life expectancy.

C. being more likely to be the victim of intentional violence.

**D.** All of the above

Unit	4	Health and human development in a global context
Area of Study	1	Health and wellbeing in a global context
Торіс	8	Comparing health status and burden of disease across countries
Subtopic	8.8	Global distribution and marketing of tobacco, alcohol and processed food

# Summary

Tobacco	<ul> <li>Around 80% of the world's billion smokers now come from low- and middle-income countries where laws, taxes and health promotion about the dangers of tobacco smoking are less prevalent.</li> </ul>
	<ul> <li>Smoking can lead to respiratory diseases such as asthma, cardiovascular disease and cancer.</li> </ul>
Alcohol	<ul> <li>Burden of disease due to increasing alcohol consumption is higher in low-income countries compared to high-income countries.</li> <li>This can lead to cardiovascular disease, overweight and obesity, injury, some cancers and mental health issues.</li> </ul>
Processed foods	<ul> <li>Foods high in fat, salt and sugar have replaced traditional diets in many low- and middle-income countries.</li> <li>Changes in food intake can lead to overweight and obesity, type 2 diabetes and cardiovascular disease, particularly stroke.</li> </ul>

# My notes



your learnON title at www.jacplus.com.au.

# Past VCAA exam questions

Source: VCAA 2016, Health and Human Development Exam, Q14a

### **Question 1**

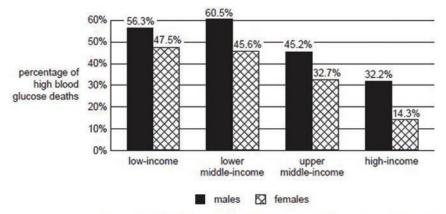
Obesity is placing a heavy burden on the world's population in both rich and poor countries. Almost 30 per cent of people globally are now either obese or overweight. Two-thirds of the obese population now live in developing countries, which also experience high rates of undernutrition.

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

Source: VCAA 2017, Health and Human Development Exam, Q9b

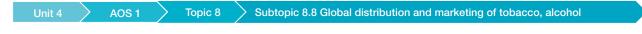
### **Question 2**

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

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. **2 marks** 



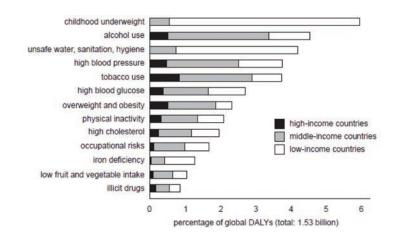
Source: Adapted from VCAA 2004 Health and Human Development Exam, Q1

#### Question 3

Over 1300 million people in the world are current smokers (World Bank, 1999). If this behaviour continues in the twenty-first century the use of tobacco will lead to one billion deaths, eighty per cent of which will occur in low-income countries [developing countries]. Within twenty years, tobacco dependence could become the world's single largest cause of premature death or years lived with disability. Outline how global marketing and distribution has contributed to increased smoking rates in low- and middle-income countries. **2 marks** 



#### **Question 4**



- a. i. From the graph, select one of the risk factors common to all three income levels for which global marketing and distribution plays a role.
   1 mark
  - ii. Discuss the influence that global marketing and distribution might have on the risk factor selected in part i.
     3 marks

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Unit 4

AOS 1

> Subtopic 8.8 Global distribution and marketing of tobacco, alcohol

Source: VCAA 2010 Health and Human Development Exam, Section A, Q9

Topic 8

#### **Question 5**

The following table indicates the leading causes of death in 2004 globally, compared with the leading causes of death predicted in 2030.

#### Table 1. Leading causes of death globally - ranked 1 to 15 for 2004 and 2030 (predicted)

Leading causes of death, 2004 and 2030 Compared			
2004		2030	
Disease of injury	Rank	Rank	Disease of injury
ischaemic heart disease	1	1	ischaemic heart disease
cerebrovascular disease	2	2	cerebrovascular disease
lower respiratory infections	3	3	chronic obstructive pulmonary disease
chronic obstructive pulmonary disease	4	4	lower respiratory infections
diarrhoeal diseases	5	5	road traffic injuries
HIV/AIDS	6	6	trachea, bronchus, lung cancers
tuberculosis	7	7	diabetes mellitus
trachea, bronchus, lung cancers	8	8	hypertensive heart disease
road traffic injuries	9	9	stomach cancer
prematurity and low birthweight	10	10	HIV/AIDS
neonatal infections and other	11	11	nephritis and nephrosis
diabetes mellitus	12	12	self-inflicted injuries
malaria	13	13	liver cancer
hypertensive heart disease	14	14	colon and rectum cancer
birth asphyxia and birth trauma	15	15	oesphagus cancer

Adapted from: www.who.int p. 33

a. Global marketing is considered to have a major influence on health status. Select one leading cause of death that is predicted to rise in ranking from 2004 to 2030 that could be due to the influence of global marketing.
 1 mark

**b.** Describe how global marketing might contribute to this increased ranking.

2 marks

Unit 4

AOS 1 Topic 8

angle Subtopic 8.8 Global distribution and marketing of tobacco, alcohol

## Exam practice questions

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

#### **Question 6**

Describe one health implication to people in low- and middle-income countries due to global marketing and distribution. **2 marks** 

Source: Jacaranda (John Wiley & Sons Australia, Ltd), Practice VCE Question

#### **Question 7**

Discuss **two** reasons why global marketing and distribution has contributed to increased obesity rates in low- to middle income countries. **4 marks** 

## Answers and marking guide

# 8.2 Economic characteristics of high-, middle- and low-income countries

#### Question 1

Examples that could be selected: **Social:** 

- Low level of gender equality
- High birth rates
- Low levels of primary education
- No health systems in place

#### **Economic:**

- High levels of poverty
- Low gross national income
- Limited or no opportunities for global trade
- Very limited range of industries
- High level of international debt
- Limited or no social security systems

#### **Environmental:**

- Poor infrastructure
- Limited access to safe water and sanitation
- Poor-quality housing with many people living in urban slums

#### **Question 2**

Award 1 mark for each of two valid links of the project's work to health and wellbeing or human development benefits.

Health and wellbeing benefits may include:

Physical health and wellbeing:

- Adequate food will ensure that all members of the family will have sufficient nutrition and will not be underweight.
- Adequate micronutrients, particularly iron, will ensure that all family members, particularly the girls, do not suffer from diseases such as anaemia.
- Being well nourished will reduce the risks associated with diseases such as osteoporosis developing later in life.
- Being well nourished and healthy will ensure that the immune system is functioning well, which will reduce the risk of disease and illness.
- Having safe water and sanitation will greatly reduce the risk of contracting life-threatening illnesses such as diarrhoea and other waterborne diseases.

Social health and wellbeing:

- Enrolling in the Building Resources Across Communities (BRAC) program with other women would mean that Suva would be interacting with others and developing social skills such as communication and leadership skills.
- Women like Suva can become empowered and feel as though they are able to control their own lives and make decisions about their family's future.

Links to human development benefits include:

Moving out of poverty and being able to attend school will mean the children are able to develop their communication skills, learn new behaviours and experience the ability to find work and undertake new roles, which will increase their choices and enable them to lead full and productive lives.

#### Question 3

#### Correct Answer is C

Economic characteristics relate to the financial or economic state of a country.

#### Question 4

#### **Correct Answer is A**

Access to sanitation is an example of an environmental characteristic, and is not an economic characteristic used to classify low-, middle and high-income countries.

#### **Question 5**

Suitable economic characteristics of a high-income country include:

- low levels of poverty
- wide range of industries
- high level of opportunities for global trade
- high average incomes.
- Award 1 mark for each of two accurate characteristics listed.

*Please note: if a quantitative term is not used, no marks are awarded. It is not enough to just write 'poverty' or 'income'* 

#### **Question 6**

Suitable economic characteristics of a low- or middle-income country include:

- high to very high levels of poverty
- limited range of industries
- low level of opportunities for global trade
- low average incomes.
- Award 1 mark for each of two accurate characteristics listed.

Please note: if a quantitative term is not used, no marks are awarded. It is not enough to just write 'poverty' or 'income'.

#### **Question 7**

Two economic characteristics relevant to Country X are:

- increase in living standards, with very few families living on less than US\$1.90 per day [1 mark]
- growth of industries, particularly in the electronics and communication fields [1 mark].

## 8.3 Social and environmental characteristics of high-, middle- and low-income countries

#### **Question 1**

#### SDG 3- Good health and wellbeing

The Framework Convention on Tobacco Control sets out guidelines to countries on ways to reduce smoking such as plain packaging on cigarettes. By discouraging people to smoke the incidence of

non-communicable diseases such as cardiovascular disease and cancer (a focus of this goal) should decrease helping to achieve SDG 3 by 2030.

Award 1 mark for identifying a relevant Sustainable Development Goal (SDG).

Award 1 mark for an example from the Framework Convention on Tobacco Control.

Award 1 mark for discussing how this example could help achieve the chosen SDG.

#### VCAA Assessment Report note:

Many students were able to identify a relevant Sustainable Development Goal related to tobacco control; however, many students had difficulty providing sufficient detail in their discussion of how the Framework Convention on Tobacco Control could help achieve the goal by 2030. Students were not awarded marks for providing only the number that the Sustainable Development Goal referred to; for example, Goal 3.

#### The following are examples of possible responses.

#### **Goal 1: No poverty**

Will help reduce global rates of poverty as tobacco is expensive and therefore money is not available to spend on education, health care and nutritious food. This can lead to poor health, which means that children are unable to attend school and adults are not well enough to work and earn an income. Therefore, they are more likely to suffer from poverty.

#### **Goal 2: Zero hunger**

When people are spending money on purchasing tobacco, there is less money available to spend on purchasing sufficient nutritious food. This means that children and women can go hungry and suffer from malnutrition. The Framework Convention on Tobacco Control will help to reduce the number of people who smoke and will therefore help achieve food security.

#### **Question 2**

#### **Correct Answer is B**

Social characteristics relate to the level of education, employment, health care and gender equality of a country.

#### **Question 3**

#### **Correct Answer is A**

Opportunities for trade is an example of a economic characteristic, not a social characteristic used to classify low-, middle- and high- income countries.

#### **Question 4**

Social characteristics of a high-income country include:

- high levels of education
- high levels of gender equality
- low birth rates
- strong political and legal systems
- well established social protection systems.

Award 1 mark for each of two social characteristics.

Please note: if a quantitative term is not used, no marks are awarded. It is not enough to just write 'education' or 'employment'.

#### **Question 5**

Social characteristics of a low- or middle-income country include:

- low levels of education
- low levels of gender equality
- high birth rates
- unstable governments and weak/corrupt legal systems
- lack of established social protection systems.

Award 1 mark for each of two social characteristics.

Please note: if a quantitative term is not used, no marks are awarded. It is not enough to just write 'education' or 'employment'.

#### **Question 6**

Two social characteristics relevant to Country X are:

- the introduction of social housing and a universal health scheme has been established [1 mark]
- birth rates have steadily decreased [1 mark].

#### Question 7

#### Correct Answer is A

Environmental characteristics relate to accessibility of food, water and sanitation, housing and infrastructure levels.

#### **Question 8**

#### Correct Answer is B

Birth rates are a social characteristic used to classify low-, middle- and high-income countries.

#### **Question 9**

Environmental characteristics of a high-income country include:

- good access to high quality and adequate food supply
- good access to safe water and sanitation
- good access to adequate housing
- well developed infrastructure roads, electricity, communication systems.
- Award 1 mark for each of two accurate environmental characteristics listed.

*Please note: if a quantitative term is not used, no marks are awarded. It is not enough to just write 'access to food' or 'sanitation'.* 

#### **Question 10**

Environmental characteristics of a low- or middle-income country include:

- · poor access to nutritious and adequate food supply
- poor access to safe water and adequate sanitation
- lack of adequate housing poor ventilation, lack of heating and cooling
- poorly developed infrastructure.
- Award 1 mark for each of two accurate environmental characteristics listed.

Please note: if a quantitative term is not used, no marks are awarded. It is not enough to just write 'access to food' or 'sanitation'.

#### **Question 11**

Two environmental characteristics relevant to Country X are:

- construction and redevelopment of major roads and rail systems [1 mark]
- access to sanitation has improved, particularly in urban areas [1 mark].

## 8.4 Similarities and differences in health status and burden of disease in low-, middle- and high-income countries

#### **Question 1**

Lower middle-income countries had the highest percentage of high blood glucose deaths for males. **[1mark]** 

#### **Question 2**

Possible answers include:

- Australia has a lower adult mortality rate than both Sudan and Indonesia.
- Australia has a lower maternal mortality rate than both Sudan and Indonesia.
- Australia has a lower under-5 mortality rate than both Sudan and Indonesia.
- Award 1 mark for each of two appropriate differences.

No marks are awarded if life expectancy is chosen as question is about mortality rate.

#### **Question 3**

- Australia has a higher life expectancy at birth, of 82.5 years, than Chad, which has a life expectancy of 51.2 years in 2013.
- Australia's under-five mortality rate, of 5 per 1000 live births, is lower than Chad by 145 per 1000 live births in 2013.

Award 1 mark for each comparison of health status between Australia and Chad (2 comparisons needed). *VCAA Assessment Report note:* 

Most students were able to read and interpret the data in the table to compare the health status of Australia to Chad. When answering this question, students needed to include the specific data provided in the table for both Chad and Australia. Students were not required to provide reasons for the differences.

#### **Question 4**

Include two of:

- good access to birthing facilities in hospitals
- good health of mothers
- sanitary living conditions
- provision of maternal and child health nurses to give guidance to parents on feeding babies.

Award 1 mark for each of two valid reasons.

#### **Question 5**

#### **Correct Answer is C**

A health status difference between low/middle-income countries and high-income countries is that low/middle-income countries have higher morbidity and mortality rates from infectious and parasitic disease than high-income countries.

#### **Question 6**

#### **Correct Answer is A**

A health status similarity is that they have all seen an increase in life expectancy in the past four decades.

#### **Question 7**

Responses could include:

- Zimbabwe, a low-income country, has a lower life expectancy than Australia, a high-income country. Zimbabwe's life expectancy is 58 years much lower than Australia's at 83 years.
- Zimbabwe, a low-income country, has a higher adult mortality rate than Australia, a high-income country. Zimbabwe's adult mortality rate is 336 deaths per 1000 much higher than Australia's adult mortality at 59 deaths per 1000.
- Zimbabwe, a low-income country, has a higher under-5 mortality rate than Australia, a high-income country. Zimbabwe's under-5 mortality rate is 89 deaths per 1000 much higher than Australia's under-5 mortality at 4 deaths per 1000.

Award 1 mark for each of two differences between a low-income country and a high-income country. (Please note: if middle-income countries are chosen, no marks can be awarded.)

Award 1 mark for accurate use of data to support each of the two differences. Maximum of 4 marks.

## Ouestion 8

Award 1 mark each for any two of the following:

- Injury mortality rates are lower than non-communicable disease mortality rates in low-, middle- and high-income countries.
- In low-, middle- and high-income countries, injury mortality rates are less than approximately 120 deaths per 100 000.

• In low-, middle- and high-income countries, non-communicable diseases contribute the highest mortality rates of the three disease groups listed.

Maximum of 2 marks

#### Question 9

#### Correct Answer is B

As life expectancy increases, the income classification of a country also increases.

#### Question 10

#### **Correct Answer is A**

Maternal mortality increases as a country's income classification lowers.

#### **Question 11**

#### Suitable conclusions include:

- Australia has a better health status than China, an upper middle-income country, as Australia's life expectancy is higher by 8 years, Australia's under-5 mortality is lower by 9 deaths per 1000 live births and Australia's maternal mortality is lower by 26 deaths per 100 000 live births.
- Australia has a better health status than Papua New Guinea (PNG), a lower middle-income country, as Australia's life expectancy is higher by 21 years, Australia's under-5 mortality is lower by 57 deaths per 1000 live births and Australia's maternal mortality is lower by 214 deaths per 100 000 live births.

Award 1 mark for a conclusion about Australia and a middle-income county (either China or Papua New Guinea).

Award 1 mark for accurate use of data. Maximum of 2 marks

#### Question 12

Under-5 mortality increases as a country's income classification decreases. For example, Japan is a high-income country with a under-5 mortality rate of 3 deaths per 1000 live births; this increases to 123 deaths per 1000 live births in Mali, a low-income country.

Award 1 mark for a valid relationship between under-5 mortality and a country's income classification. Award 1 mark for accurate use of data.

### 8.5 Access to safe water and sanitation

#### **Question 1**

Safe water refers to water that is not contaminated with disease and is fit for humans to consume. **[1mark]** Sanitation refers to the provision of facilities and services for the safe disposal of human urine and faeces, including hygienic practice. **[1 mark]** 

#### VCAA Examination Report note:

This question assessed students' understanding of the concepts of safe water and sanitation. Moststudents struggled to provide the level of detail required in their response.

#### **Question 2**

Collecting water can take considerable time — especially if the water supply is a long distance from the family home. Girls and women who spend the majority of their day collecting water have little spare time to attend school or work to earn an income. This can impact on their human development as 'without an income' it may be difficult to provide the family with a decent standard of living or adequate health care and food. Girls who cannot attend school have limited choices and may find it difficult to develop to their full potential and lead productive and creative lives due to lack of skills, knowledge and opportunity. Award 1 mark for providing an example of why collecting water is a burden for girls and women. Award 1 mark for describing how this burden impacts on human development.

#### VCAA Assessment Report note:

Many students focused on individual human development rather than on human development as defined by the United Nations (UN). The UN definition of human development is provided in the study design.

#### **Question 3**

#### **Correct Answer is D**

A lack of safe water can lead to diarrhoeal disease, cholera and dysentery.

#### **Question 4**

#### Correct Answer is C

The relationship between income classification of a country and access to safe water is as the income classification of a country decreases, access to safe water decreases.

#### **Question 5**

Access to adequate sanitation is much higher in high-income countries than low-income countries — by 71%. Having access to adequate sanitation means that wastes are safely removed and the risk of contamination of water supplies is reduced. Adequate sanitation therefore can reduce the risk of diseases such as diarrhoea, a major cause of death of children under 5. This may explain why under-5 mortality is much lower in high-income countries than low-income countries — by 70 deaths per 1000 live births. Award 1 mark for identifying the difference in access to sanitation between low- and high-income countries. Award 1 mark for explaining how this difference contributes to the difference in health status. Award 1 mark for using data from the table to illustrate a difference in health status between high- and low-income countries.

#### **Question 6**

Reasons could include:

- Children may be forced to drink unsafe water if that is all that is available. Unsafe water increases the risk of diarrhoeal disease, which may prevent children from attending school as they are too ill to do so.
- Children may have to spend much of their day collecting water from safe water sources. This may leave little or no time to attend school.

Award 1 mark for each of two reasons why a lack of safe water may influence the ability of children to attend school.

### 8.6 Poverty

#### **Question 1**

*Please note that Australia is considered a high-income country and Vietnam is considered a lowermiddle-income country.* 

Poverty is one possible reason. Most Australians earn sufficient income to pay taxes to help fund the Pharmaceutical Benefits scheme. This scheme provides low cost medicines to treat diseases such as tuberculosis. Although Vietnam is a lower middle-income country, many people still live in poverty, and as such the government may not be able to provide low-cost medicines, making medicines to treat diseases such as tuberculosis unaffordable for many. This may explain why the tuberculosis incidence rate in Vietnam at 140 per 100 000 population is much higher than in Australia, where it is 6.4 per 100 000 population.

Award 1 mark for identifying a relevant reason.

Award 1 mark for explaining how this reason causes a difference in tuberculosis rates between Australia and Vietnam.

Award 1 mark for using data from the table to illustrate differences in tuberculosis rates between Australia and Vietnam.

#### VCAA Examination Report note:

This question required students to apply their knowledge of the reasons for the differences in the burdens of disease in developed and developing countries to tuberculosis, which is a feature of Sustainable Development Goal (SDG) 3. Where students were familiar with the disease, they were generally able to account for the difference in incidence between Australia and Vietnam. Other examples included: Australia has a higher income or GDP than Vietnam, access to healthcare is higher in Australia than in Vietnam, education enrolment rates and levels of education are higher in Australia than in Vietnam, and physical environment (especially housing) where Vietnam has poorer quality and overcrowded housing compared to Australia.

#### **Question 2**

High-income countries, compared to low-income countries, have governments that, through taxes collected, can ensure infrastructures such as safe water and sanitation systems are built and maintained. Access to safe water and sanitation reduces the risk of death due to diseases such as diarrhoea — a major

killer in low-income countries.

Award 1 mark for a comparison between low- and high-income countries.

Award 1 mark for the relationship between income and causes of death.

#### **Question 3**

Many families in Zimbabwe live on less than US\$1.90 per day. If families are poor then insufficient money is available for food; this means that children are often malnourished and underweight. Being underweight increases the risk of contracting other diseases.

This may explain why infectious diseases are more common in Zimbabwe than Australia where food supply is plentiful and agencies are set up to assist those who cannot afford adequate food.

Award 1 mark for an example of how low income is related to higher rates of infectious and parasitic disease in Zimbabwe.

Award 1 mark for a comparison with Australia.

#### **Question 4**

Countries with higher income tend to have higher life expectancy. For example, Australia's GNP is int\$45 320 per head and its life expectancy is 83 years; Zimbabwe's GNP is int\$1710 per head and its life expectancy is 58 years.

Award 1 mark for stating that as income increases, so does life expectancy.

Award 1 mark for an accurate data example to support this.

#### **Question 5**

People who are unable to read and write have to rely on gaining employment in jobs that require no literacy skills, where workers are subject to exploitation and unsafe conditions.

Exploitation of these workers often means that they may not be paid a fair wage and may earn less than what is considered sufficient to live on.

Award 1 mark for an example of a lack of education.

Award 1 mark for how it contributes to poverty.

#### **Question 6**

The minimum age of marriage for women has been raised to 18 years. This will improve the physical health of Mozambiquan women, as fewer young girls will be forced into early marriage and suffer conditions such as fistula from protracted births because of their underdeveloped reproductive systems.

Award 1 mark for a relevant example from the extract.

Award 1 mark for explaining how this example will improve health of women.

## 8.7 Inequality and discrimination

#### **Question 1**

*Please note that in the current study design developing countries would be considered low and/ormiddle-income countries* 

Award 1 mark for any two of the following:

- In some low- and middle-income countries, women are often not given the same opportunity for education as men and therefore have more difficulty finding full-time work due to illiteracy.
- In some low- and middle-income countries, women are often responsible for the care of children and household chores, leaving them little time for full time work.
- In some low- and middle-income countries, women are often seen as less important than men and may be given less food, which could impact on their ability to work full time due to lack of energy.
- In some low- and middle-income countries, women often have less say in decisions that affect them. This may hinder their ability to work full time if they don't have permission from their husband.
- In some low- and middle-income countries, laws may exist that discriminate against women preventing them from engaging in full-time work.

#### **Question 2**

- **a.** Discrimination is the unjust and negative treatment of individuals or groups of people [1 mark] due to their gender, race, religious beliefs and/or sexual orientation. [1 mark]
- **b.** Racial discrimination often results in social exclusion and feelings of worthlessness. This could impact on health status and burden of disease, as this may lead to increased morbidity from depression and increase years of life lost due to disability.

Award 1 mark for an example of discrimination.

Award 1 mark for showing how example chosen impacts on health status and burden of disease.

#### VCAA Examination Report note:

Many students explained how discrimination could contribute to differences in health status and burden of disease, although a common error was not linking their example to the impact on health status or burden of disease.

#### **Question 3**

Gender inequality in developing countries such as Sudan may result in women being seen as less privileged and less important than males [1 mark]

therefore they may be fed after men or are not given as much food as males in the family, hence reducing the availability of food for women [1 mark].

Award 1 mark for a comparison between males and females.

Award 1 mark for a relevant link to food.

#### VCAA Assessment Report note:

Possible answers that students could have presented included:

- females often have low status and are viewed in terms of their ability to care for the family and perform household tasks. Females usually eat last which means they may get little food
- women are likely to suffer ill health as a result of violence as it is acceptable in some countries for men to beat their wives and control their access to food
- it is often the responsibility of the woman to collect water and firewood, which decreases the time they have available for farming and food production
- women are often unable to own their own land or have control over financial matters, which means money may be spent on things other than food.

#### Question 4

In many low- and middle-income countries, girls experience inequality and discrimination. Often girls (particularly from rural areas) are forced into early marriage. Early marriage usually means early pregnancy

and the associated complications that arise from having a baby when the mother's body is not fully developed for delivery.

This affects health status as, if labour is protracted, the risk of the mother and the baby dying is greater or the risk of injury from fistula is higher.

Award 1 mark for an example relevant to inequality and discrimination.

Award 1 mark for an explanation of how inequality and discrimination create differences in health status for girls in low- or middle income countries.

#### Question 5

#### **Correct Answer is A**

Indigenous communities and ethnic minorities having lower life expectancy and higher rates of ill-health and disability is an example of race inequality and discrimination.

#### **Question 6**

#### **Correct Answer is D**

Inequality and discrimination can contribute to a range of negative health outcomes including:

- higher rates of depression and anxiety
- lower life expectancy
- being more likely to be the victim of intentional violence.

## 8.8 Global distribution and marketing of tobacco, alcohol and processed food

#### **Question 1**

Global marketing of processed foods has meant that more people in low and middle income countries have access to foods that are high in fat, sugar and salt. This coupled with people in these countries moving from the country to the cities to find work means they have greater reliance on processed foods because they lack the space and time to grow more traditional foods. Fat and sugar found in processed foods are high in kilojoules. Excess kilojoules not used by the body are stored as body fat and overtime lead to overweight and obesity.

Award 1 mark for identifying an example of global marketing.

Award 1 mark for explaining how this example contributes to the increase of people who are overweight or obese.

#### VCAA Assessment Report note:

Many students were able to explain how global marketing has contributed to the increase in the number of people who are overweight or obese. Most students focused their answer on the influence of the promotion of processed foods or alcohol. Students are reminded that smoking does not contribute to obesity and discussion on this aspect was not relevant.

#### **Question 2**

Please note that in the current study design, global marketing is now known as global distribution and marketing of tobacco, alcohol and processed foods, and access to health care is no longer a focus. The global marketing and distribution of processed foods has seen an increase in consumption of high energy foods in low income countries. Traditional diets in these countries are often replaced with processed foods, which are high in kilojoules and increase the risk of high blood glucose levels. This along with limited opportunities to treat conditions arising from high blood glucose levels, due to inability of many to pay, may explain why deaths from high blood glucose levels are higher in both males and females in low-income countries.

Award 1 mark for an example of global distribution and marketing.

Award 1 mark for showing how this example causes a difference in deaths attributed to high blood glucose between high- and low-income countries.

#### VCAA Examination Report note:

Many students found this question challenging, particularly where they had to apply global marketing and access to healthcare to differences in the percentage of deaths attributed to high blood glucose across the country groups. Many students discussed the impact of global marketing but were unable to link their discussion to high blood glucose deaths. Many students focused their discussion on males at an individual level or socio-economic status at an individual level rather than on the differences between countries, and therefore did not answer the question being asked.

#### **Question 3**

Smoking is in decline in high-income countries, so tobacco manufacturers are targeting low- and middle-income countries to promote and sell their cigarettes.

Low- and middle-income countries are often poor and without the income to allocate to health promotion; therefore; people in developing countries may be unaware of the dangers of smoking, which could explain why rates are increasing.

Award 1 mark for an example of global marketing and distribution.

Award 1 mark for how this has increased smoking rates in developing countries.

#### Question 4

- **a.** i. 1 mark awarded for one of the following:
  - alcohol use
  - tobacco use
  - overweight/obesity.
  - ii. Tobacco use:

This could be due to a shift in markets away from high income countries due to successful strategies to address tobacco-related harm. As companies wish to continue increasing profits from the sale of tobacco, markets have opened up in both middle- and low-income countries, many of which do not have restrictions on the sale of cigarettes.

This may explain why global DALYs are higher in middle- and low-income countries.

Award 1 mark for identifying that all countries have been negatively impacted by global marketing and distribution.

Award 1 mark for explanation of the role of global marketing on chosen risk factor.

Award 1 mark for using data from the graph.

#### **Question 5**

**a.** Leading causes of death predicted to rise due to global marketing may include:

- diabetes mellitus
- hypertensive heart disease
- liver cancer
- colon and rectal cancer
- oesophagus cancer
- stomach cancer
- tracheal, bronchus and lung cancer
- chronic obstructive pulmonary disease.

Award 1 mark for a relevant cause.

#### VCAA Assessment Report note:

Road traffic injury is an example of a cause of death that is expected to rise in ranking, but it is more likely to be attributed to factors such as speed and the use of seatbelts or helmets rather than global marketing.

**b.** Description may refer to:

- The global marketing of processed food has seen a replacement of local and traditional foods with those that have higher levels of sugar, fat and salt. This has contributed to the increased incidence of diseases such as diabetes mellitus, colon and rectal cancer, and hypertensive heart disease.
- The global marketing of tobacco has meant that markets have opened up in countries where there is little regulation on the sale of cigarettes and consumption of cigarettes has increased. This has then increased the incidence of lung cancer, other cancers such as oesophagus cancer, and chronic obstructive pulmonary disease.
- The global marketing of alcohol has seen high levels of alcohol being consumed globally. This has increased the incidence of diabetes mellitus, road traffic injuries, colon and rectal cancer, liver cancer and stomach cancer.

Award 1 mark for each of two key points in a relevant decsription.

#### VCAA Assessment report note:

Many students were unable to apply the concept of global marketing to the rise in the ranking of the illness they had chosen in 9a. Global marketing is one of the concepts in Unit 4, Outcome 1. The global marketing of cars was not acceptable as the cars are not a direct cause of the injuries; the direct cause of the injury is the driver and their behaviour.

#### **Question 6**

As a result of global marketing and distribution, the intake of processed foods has increased in low- and middle-income countries. These foods affect physical health and wellbeing as they contain high amounts of fat, salt and sugar, all of which are risk factors for cardiovascular disease.

Award 1 mark for an example of global marketing and distribution.

Award 1 mark for how this example impacts on health.

#### **Question 7**

- As a result of global marketing, many companies have opened businesses in low- and middle-income countries. This has increased employment prospects and many rural people have moved to urban areas for jobs. Often the opportunity to grow their own food is limited in urban areas so there is an increased reliance on processed foods, which are high in fat and refined carbohydrates and increase the risk of overweight and obesity.
- Aggressive marketing by multinational companies in urban areas of low- and middle-income countries is usually of foods high in energy. High-energy foods contribute excess kilojoules to the diet, which, if not used, could increase obesity levels.

For each reason:

- award 1 mark for an example of global marketing and distribution
- award 1 mark for how this example increases the prevalence of obesity.