



2006 Health and Human Development GA 3: Written examination

GENERAL COMMENTS

There were 10 544 students who sat the Health and Human Development examination in 2006. As in previous years, too many students did not read the questions carefully. Many students seemed to read the first two words of a question then jump into their answer rather than checking what was being asked of them (see comments on Question 1c.). Students must spend time checking their answers and ensure that the question asked has been answered.

It was pleasing to see that fewer students used script books. Enough space is provided in the examination booklet for expected answers, therefore students who run out of room when writing their responses may need to think about their answers more carefully and cut out irrelevant material. Many students just used the script book to write the last few words of a sentence when there was ample space on the paper itself. Students should practise answering questions using short, precise responses.

Students should use pen rather than pencil as it is easier for assessors to read.

The examination drew from Units 3 and 4 of the study design. Teachers must ensure that all parts of Units 3 and 4 have been covered during the year.

SPECIFIC INFORMATION

Note: Student responses reproduced herein have not been corrected for grammar, spelling or factual information.

Question 1a.

| | | | | | | |
|--------------|----------|----------|----------|----------|----------|----------------|
| Marks | 0 | 1 | 2 | 3 | 4 | Average |
| % | 4 | 9 | 24 | 31 | 32 | 2.8 |

The normal characteristics of development had to be specific for the lifespan stage. Many students found this difficult to do for social development and emotional development.

Following is an example of a high-scoring response.

- *Physical development: increasing competence in the use of fine motor skills such as catching a ball with your hands and gross motor skills such as running.*
- *Social development: may begin to play alongside other children and learn through observation acceptable behaviour with others.*
- *Emotional development: will begin to be able to control their emotions better, such as anger.*
- *Intellectual development: will be acquiring language and communication skills such as increase in vocabulary and knowledge of how to use words in a sentence.*

Question 1b.

| | | | | | |
|--------------|----------|----------|----------|----------|----------------|
| Marks | 0 | 1 | 2 | 3 | Average |
| % | 29 | 21 | 27 | 23 | 1.5 |

Many students did not answer this part of the question or provided an unclear example of an inherited factor. Students could have used the example of gender – males and females develop physically at a very similar rate at this age, although males may be slightly heavier/taller. Predisposition to genetic disorders could be another example – a two year old’s development may be affected, for example, by slower motor development in children with Down’s syndrome.

Following is an example of a high-scoring response.

- *Inherited Factor: Rate and timing of development – growth hormones.*
- *Role: Genes determine the quantity of growth hormones – thyroid stimulating hormone – that will be released and when they will be released. This will influence growth patterns – how quickly changes in height and weight occur in two year olds.*

Question 1c.

| | | | | | | | | |
|--------------|----------|----------|----------|----------|----------|----------|----------|----------------|
| Marks | 0 | 1 | 2 | 3 | 4 | 5 | 6 | Average |
| % | 23 | 24 | 21 | 16 | 9 | 4 | 3 | 1.9 |

Too many students did not answer this part of the question either. This was disappointing as it is a clear dot point in the study design (the last dot point in the key knowledge on page 26). Those who did answer it read the three nutrients and then wrote about food sources and described the function of each of the nutrients. Too many did not realise that they were being asked to describe the interrelationship of the nutrient in the formation of hard tissue.



Protein is required as a structural component – the protein collagen forms 97 per cent of the basic structure of the bone matrix; over this matrix calcium is deposited in the process of ossification. Vitamin D is not a structural component of bone but it is required for the absorption and deposition of calcium. Calcium and vitamin D work together to form hard tissue – vitamin D assists in the uptake of calcium and the incorporation of calcium into the bone.

Following is an example of a high-scoring response.

Protein forms the matrix of bones and teeth onto which calcium is deposited. Vitamin D is essential for the absorption of calcium from the small intestine. Vitamin D aids ossification as it helps these essential nutrients to be deposited onto the matrix. The three nutrients interrelate by protein building the tissue/matrix providing structure, vitamin D helping depositing calcium onto the matrix where calcium ossifies thus making the tissue hard and strong.

Question 1d.

| Marks | 0 | 1 | 2 | 3 | Average |
|-------|----|----|----|----|---------|
| % | 15 | 19 | 35 | 31 | 1.8 |

Many misunderstandings of rural children and perceived disadvantages were given in responses to this question. Many students said that Cody would have negative social development because he only had his parents to learn from and he wouldn't learn how to interact with others. However, the parents of most two-year-old children have the main role in helping their children learn how to socialise, wherever they live.

Many students described social health rather than social development; for example, Cody would be sad because he would not have other children to play with because of his isolated location. Social development is about learning skills and knowledge to enable interaction with others. The two responses that follow show how location or family may influence social development.

Family: Cody's family will have a major impact on his social development, as they are the primary agency of socialisation for this age group. For this reason Cody's caregivers provide the first interaction that will influence his development of communication skills. Through the family Cody will also develop an understanding of acceptable behaviours and culturally appropriate roles and how to act appropriately in social situations such as using manners with others.

Location: Cody lives on a farm outside of town with his parents. He may have few neighbours with children his age nearby and therefore may not have the opportunity to socialise with different people. He may miss the opportunity to learn how to play with others his age. This may contribute negatively to his social development unless his parents are aware and try to take him on social outings so he has the opportunity to develop his social skills, for example sharing and trusting in playing with other children.

Question 2a.

| Marks | 0 | 1 | 2 | Average |
|-------|----|----|----|---------|
| % | 10 | 31 | 58 | 1.5 |

Some students did not appear to have read this question carefully as they did not choose one of the factors, a cause of death from Table 1, or show a difference between the two regions in Table 1. The following student examples show the three parts of the question being combined well.

*Factor: Lack of access to primary health care
Difference: Diarrhoea is highly treatable through the use of oral hydration which is taught by health professionals. In South East Asia they may have little access to treatments such as this and consequently many children die unnecessarily compared with the countries in the western Pacific who have access to primary health care and deaths are prevented.*

*Factor: Poverty
Difference: Children suffering from poverty are more likely to live in poor living conditions with poor water and sanitation increasing the likelihood of diarrhoeal diseases. Poorer families are likely to have less knowledge about health, in particular hygiene to protect or prevent diarrhoea. Western Pacific countries on the other hand experience better infrastructure that prevents the spread of diarrhoeal diseases through contaminated water.*

Question 2bi.

| Marks | 0 | 1 | 2 | 3 | Average |
|-------|----|----|----|----|---------|
| % | 21 | 14 | 30 | 36 | 1.8 |

The contribution of AusAID to international health programs is a dot point in the study design, but many students were unable to correctly answer this question. Immunisation programs for measles is a strategy supported through AusAID funding. Safe water and sanitation is another wide spread strategy supported by AusAID through other groups such as Oxfam; students who listed Oxfam itself, or World Vision, were incorrect. Following are two examples of high-scoring responses.



Strategy: Building safe water

Cause of death: Diarrhoeal disease

Explanation: Work with the community to identify appropriate areas for building wells so safe water is accessible. A high incidence of mortality is caused by contaminated water supplies in developing countries. Many individuals are forced to drink water from the same rivers or streams where faeces are deposited thus causing considerable disease. The implementation of safe water and sanitation would reduce the prevalence of diarrhoeal diseases as well as reducing malnutrition that arises out of infection and the depletion of nutrients from the body.

Strategy: Immunisation

Cause of death: Measles

Explanation: Local health workers are trained to give immunisations and to educate the community especially women on preventing measles. Through the preventative approach, children can be immunised against measles. The simple immunisation process builds immune systems to fight the disease. Immunisation improves health and ensures children can play and build motor skills and social skills.

Question 2bii.

| Marks | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Average |
|-------|----|---|---|----|----|---|----|---|---|---|---------|
| % | 25 | 5 | 9 | 11 | 11 | 9 | 11 | 7 | 5 | 6 | 3.6 |

Many students left this section blank, which was unwise. Those who just listed examples of elements of sustainable primary health care (the last dot point in the key knowledge on page 27), for example, affordable, equitable and fair, culturally appropriate or community involvement), were able to gain some marks. Students had to draw from part bi. to help with answering this question.

Following is an example of a high-scoring response.

Element 1: Culturally appropriate

Effect: The implementation of safe water and sanitation requires community consultation to ensure the way in which it seeks to reduce diarrhoeal diseases fits into the culture of the country. The strategy must be sensitive to traditional health practices and inclusive of communal knowledge to ensure the community takes ownership and helps develop a sense of autonomy from the aid givers.

Element 2: Education

Effect: Individuals are often unaware of the causes of diarrhoeal diseases or how to stop infection. The community should be given information on the transmission of diseases such as cholera and encouraged to participate in sanitation and hygiene. This information should be provided in a manner that is comprehensible. Strategies to support high levels of literacy such as song and dance or pictures may be appropriate.

Element 3: Include the community

Effect: The implementation of foreign practices such as pit latrines or toilets may be threatening and intrusive to individuals. The community, including women, should be included in the development of safe water systems such as wells or sanitation systems such as toilets to ensure they take ownership. It is likely that manpower will be necessary so men from the community should be included to ensure long term sustainability. Also local and traditional knowledge are useful so the practices of the community should be built on to ensure ownership.

Questions 3ai–iii.

| Marks | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Average |
|-------|---|----|----|----|----|----|----|---|---|---------|
| % | 1 | 10 | 16 | 20 | 21 | 14 | 11 | 4 | 2 | 3.7 |

3ai.

The social model of health is a part of the first dot point in Unit 3, Area of Study 2, Outcome 2 (on page 22 of the study design). It is based on the understanding that health is linked to a range of social, environmental and economic factors, not just biomedical factors.

The Ottawa Charter is an example of an approach developed from the social model of health. The Charter is based on social health principles and provides some examples of actions that are widely used in public health programs. For example, the Ottawa Charter action ‘reorienting health services’ comes out of the principle that health is determined by a broad range of social, environmental and economic factors and not just biomedical risk factors.

Following are two examples of high-scoring responses. The second response used the actions of the Ottawa Charter to develop an excellent answer.

- 1. The social model of health recognises that many of our diseases are preventable and so it focuses on prevention.*
- 2. However it recognises that due to broader social, cultural and political factors, some groups have poorer levels of health than the general population.*

3. *The social model of health aims to address these inequities thus improving the health status for all.*
 4. *This model of health aims to improve the health status of whole populations, not just individuals, therefore public health is emphasised.*
1. *Developing the personal skills of the population through increasing their understanding of the relationships between health and nutrition and behavioural risk factors.*
 2. *Creating supportive environments refers to both the physical and social environments in which individuals live and that they may be conducive to change.*
 3. *Reorienting health services is important so as to balance health promotion and prevention with the curative or biomedical approach.*
 4. *Building healthy public policy involves legislation or regulation being developed by governments or organizations to promote healthy behaviours rather than just cures.*

3a.ii.

The material given at the beginning of Question 3 provided some material for students to draw from for their answer to this question. Many students appeared not to have read this stimulus material for the whole question. A number of students made inappropriate and offensive comments about Indigenous peoples in their responses to this question and part a.iii.

Following is an example of a high-scoring response.

Often Indigenous Victorians have a lower level of socio-economic status than non-indigenous Victorians. Socio-economic status has a large influence on health status. Low health status is often related to low socio-economic status, for example levels of education are lower hence the Indigenous may not be aware of risk factors for disease, eg. smoking and the relationship with lung cancer/chronic lung disease as demonstrated above. Socio-economic status is the prestige associated with education, occupation and income. Indigenous Australians have lower socio-economic status as a result of a range of cultural, social and environmental factors. They may be unable to access health care as often as non-indigenous for checkups of primary prevention such as blood pressure checks so they experience a higher degree of circulatory system diseases eg. cardiovascular disease. This is also connected with low income which means that they may not purchase nutritious foods rather choose foods high in saturated fats and salt also contributing to circulatory diseases and their shortened life expectancy.

3a.iii.

Links between individual behaviour and a person's state of health are generally well recognised. Indigenous Victorians may have high levels of unemployment or underemployment, which may lead to boredom and high levels of substance abuse (such as high smoking and alcohol intake), with the consequent impacts on health as shown in the data at the beginning of Question 3.

By reading the stimulus materials students should have been able to recognise, for example, that the difference in chronic lung disease between Indigenous and non-Indigenous Australians may be caused by higher rates of smoking in Indigenous people.

Question 3b.

| Marks | 0 | 1 | 2 | 3 | 4 | Average |
|-------|----|----|----|---|---|---------|
| % | 48 | 27 | 16 | 6 | 3 | 0.9 |

Many students did not attempt this part of the question, which extended their thinking. A similar question on the 2005 paper asked students to identify biomedical and preventative approaches in spending; students could have drawn on the knowledge of an opposite approach to the biomedical to help them in this answer.

Students could have answered by saying that it was difficult to judge as little information was provided in the table to tell exactly what each category covers; for example, how much health promotion is focused on social, environmental and economics factors that affect health. There is no breakdown of how much expenditure is focused on those with differing health statuses linked to social factors such as culture, race, ethnicity and location.

The health budget needs to be studied alongside other areas of public expenditure to determine the total impact on health; for example, education, employment and housing initiatives.

The following response by a student shows one way of answering the question.

It reflects the social model of health moderately well. The health expenditure does allocate resources to preventative approaches to health ie. food standards and hygiene, organised immunisation and selected health promotion amongst others. This reflects the move from biomedical to preventative approach to health. However it does not consider the environmental factors which impact health very well as only 2.2% of the health expenditure is allocated to 'environmental health' and 1.4% allocated to 'food standards and hygiene'. A social model of health considers these factors and the health expenditure does not clearly.

Question 3c.

| Marks | 0 | 1 | 2 | 3 | 4 | 5 | 6 | Average |
|-------|----|----|----|----|---|---|---|---------|
| % | 24 | 26 | 25 | 14 | 7 | 2 | 2 | 1.7 |

All the data in Question 3 could have been used to answer this question. Students needed to analyse the data and evaluate it in order to reach an opinion. They should have noted that the current expenditure on public health is not working for Indigenous Victorians given the health status indicators included at the beginning of the question. Students could have indicated that one reason for this may be the definition of health provided by Aboriginal people given in the introduction to the question. This should have then prompted students to think of other approaches that may impact more on the health of Indigenous peoples in Victoria; for example, education, employment and housing.

Many students failed to take note that the Indigenous population in Victoria is distributed evenly between metropolitan and country regions, therefore they are likely to live in similar places to the non-Indigenous population but their health status is very different.

The student example below highlights some of the appropriate issues to consider when working to improve the health of Indigenous people in Victoria. Answering in dot point format was acceptable.

- *Public health expenditure has to address and meet the needs of Indigenous Victorians, considering their cultural differences and identifying what areas contribute to the greatest burden of disease.*
- *Needs to address aspects of social, economic and environmental to improve the health of indigenous people as shown in the definition of health above.*
- *Building healthy public policy – focusing on funding and resources on health of indigenous in policy making to provide resources and health care in a culturally sensitive manner.*
- *Creating supportive environments – where they live and learn that can promote health eg providing physical resources to promote physical activity and better food.*
- *Strengthening community action – enable individuals and the Indigenous community to work together to prevent disease and illness and send a consistent message to make healthy choices for life – eg environmental health – can organise campaigns for tree growing days or work together to clean up environment and build community self esteem.*
- *Develop personal skills – enable individual Indigenous people to be educated with knowledge and skills to take control over and improve health, make healthier choices, build self esteem eg. be educated about food standards and hygiene to reduce diarrhoeal diseases and weaken immunity, improving health.*

Questions 4ai–ii.

| Marks | 0 | 1 | 2 | 3 | 4 | Average |
|-------|----|----|----|----|----|---------|
| % | 15 | 20 | 22 | 23 | 20 | 2.1 |

4ai.

DALY: Disability Adjusted Life Years – years of healthy life lost through premature death and living with disability due to illness or injury.

Students needed to define the term DALY. Many students successfully used the equation $DALY = YLL + YLD$ to guide their definition. Students had to explain YLL (years of life lost) and YLD (years lost due to disability) to gain full marks.

4aii.

Many students who were able to define DALY successfully were unable to apply their definition. All the conditions listed in Table 3 are included in the National Health Priority Areas so students should have some understanding of the conditions. Following are excellent response from two students.

The DALYs for the two are the same because a DALY takes into consideration both morbidity and mortality. The high death rate for colo-rectal cancer is balanced out by the disability and lost productivity caused by osteoarthritis.

Osteoarthritis is associated with a severe loss of quality of life or years of healthy life lost due to disability. It is a disabling disease that is non-fatal but contributes considerably to DALYs because of the severity of its impact on the maintenance of usual life roles. Conversely, colo-rectal cancer contributes significantly to death because treatment is not always effective thus it causes death. Colorectal cancer contributes to DALYs through the premature death that it causes and thus equals osteoarthritis in terms of its impact on health and life expectancy.

Questions 4bi–ii.

| Marks | 0 | 1 | 2 | 3 | 4 | Average |
|-------|----|----|----|----|----|---------|
| % | 10 | 18 | 30 | 22 | 20 | 2.3 |

4bi.

Most students used Type 2 Diabetes or Ischaemic Heart Disease to answer the question; however, many used osteoarthritis, even though the question specifically instructed them not to. This was another example of not reading the question carefully. Following are two examples of high-scoring responses.

Condition: Type 2 Diabetes

Risk factor: A diet high in saturated fat, low in dietary fibre and high in simple carbohydrates contributes to increased fat cells in the body. Overweight/obesity is a risk factor for type 2 diabetes. Consuming energy dense foods will cause high blood glucose levels and the glucose cannot be absorbed as the pancreas may not be able to balance these effects with insulin produced.

Condition: Ischaemic heart disease

Risk factor: Increased consumption of salt/sodium, saturated fat, cholesterol and low fibre consumption increase the risk. For example, saturated fat increases the amount of cholesterol deposited in arteries. This can cause blocking of the arteries and difficulty in pumping enough blood to the heart.

4bii.

Many students wrote the opposite to what they had written in part bi. No marks were awarded for doing this unless the explanation was able to provide the reason for protection.

The following excellent response gave the nutrition example followed by a reason why it was protective.

Condition: colorectal cancer

Protective factor: increase consumption of fibre in vegetables in the diet will help protect an individual against colorectal cancer. Fibre speeds up the passage of food through the gastrointestinal tract, limiting the time of the colon's exposure to cancer-promoting foods.

Question 4c.

| Marks | 0 | 1 | 2 | 3 | 4 | 5 | 6 | Average |
|-------|----|---|----|----|----|---|----|---------|
| % | 20 | 8 | 17 | 19 | 16 | 9 | 10 | 2.7 |

Many students were unable to provide examples of the consequences for the Australian Health Budget of the rise in obesity figures. Students were expected to provide a specific consequence, not just write 'direct costs'. One mark was allocated for listing the consequence and up to two marks for the explanation of the effect. Following are some clear examples provided by students.

Consequence: predisposes to hypertension

Effect: Obesity causes risks to hypertension. Much money is spent on high blood pressure and blood cholesterol tests as well as medications. Doctor and health professionals are increased thus increasing pressures on health budgets.

Consequence: increased incidence of cardiovascular disease

Effect: More money will have to be invested in hospital facilities to cope with the increased demand for heart surgery.

Consequence: An increased need for pharmaceuticals

Effect: Increased funds will have to be allocated to the Pharmaceutical Benefits Scheme to cover the costs of medication such as statins to lower blood cholesterol as a result of obesity.

Consequence: Increased risks of other diseases

Effect: Obesity increases the risk of many diseases including Type 2 diabetes and cardiovascular disease which will increase peoples' need to access health care services increasing the costs to run these services.

Consequence: Increase in Medicare rebates

Effect: As obese people are more likely to need medical assistance and visit doctors more regularly it will increase the amount of medicare rebates which will be an increase in Australia's Health Budget.

Questions 4di–ii.

| Marks | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Average |
|-------|----|----|----|----|----|----|---|---|---|---|----|---------|
| % | 19 | 10 | 12 | 11 | 12 | 10 | 9 | 7 | 5 | 3 | 2 | 3.5 |

4di.

This question was not answered well. Too many students showed no understanding of the Dietary Guidelines for Adults, even though they are included in the required study for Unit 3, Area of Study 2, Outcome 2. The Dietary Guidelines for Adults are as follows.

2006 Assessment Report

Enjoy a wide variety of nutritional foods:

- eat plenty of vegetables, legumes and fruits
- eat plenty of cereals (including breads, rice, pasta and noodles), preferably wholegrain
- include lean meat, fish, poultry and/or alternatives
- include milks, yoghurts, cheeses and/or alternatives. Reduced fat varieties should be chosen where possible
- drink plenty of water.

And take care to:

- limit saturated fat and moderate total fat intake
- choose foods low in salt
- limit your alcohol intake if you choose to drink
- consume only moderate amounts of sugars and foods containing added sugars
- prevent weight gain: be physically active and eat according to your energy needs
- care for your food: prepare and store it safely
- encourage and support breastfeeding.

Students were given one mark for naming the dietary guideline correctly and up to two marks for the link to maintaining a healthy body mass index. Following are some good examples provided by students.

Dietary guideline: Eat plenty of fruit, vegetables and legumes

Assistance in maintaining a healthy body mass index: These foods are all high in fibre and carbohydrate and low in saturated fats which helps to reduce the amount of excess energy consumed which will lead to people maintaining a healthy body weight.

Dietary guideline: Include plenty of cereals (including breads, rice, pasta and noodles)

Assistance in maintaining a healthy body mass index: Carbohydrates, particularly the complex Carbohydrates, are the body's preferred source of energy. The fibre in cereals helps to prevent overeating as it is 'filling' and helps to maintain a healthy weight.

Dietary guideline: Limit intake of alcohol

Assistance in maintaining a healthy body mass index: Alcohol has no nutritional benefit, it is energy-dense containing many excess kilojoules. This guideline aims to minimise consumption and in turn additional kj the body may not use and therefore store as fat. Additional fat storage increases weight and therefore BMI.

4dii.

This part of the question was not done well, especially if students did not know the Dietary Guidelines. Some reasons why the Guidelines may not be completely successful in making effective changes to food intake include:

- they have not been successful so far in significantly reducing diet-related diseases so probably will not be in the future; for example, since their introduction there has been a significant increase in obesity in Australia
- alternative, low-nutrient foods are so readily available and well advertised that it is difficult for guidelines alone to change food choices
- they are only guides and do not help many people to choose appropriate foods; for example, 'how is a low fat food known?'
- they may not provide enough information for people choosing food; for example, 'what is meant by foods low in salt?' – salt is given many names on food labels and consumers may not know these
- the large variety of foods available makes food choices difficult
- no serving sizes are provided in the guidelines
- there are no definitions for words such as 'moderate', 'limit', 'eat according to your energy needs' and 'eat plenty'.

Students should have explained at least two points to gain up to four marks.

Following is an example of a response that scored full marks.

An individual may have little education about nutrition and may find it difficult to understand what constitutes a serving size, consequently making it difficult to effectively change their food intake. Also the dietary Guidelines only discuss basic foods not combination foods such as pizza, lasagne or biscuits making it increasingly difficult for an individual to accurately assess and then change their food intake.

Questions 5ai–ii.

| Marks | 0 | 1 | 2 | 3 | 4 | Average |
|-------|----|----|----|----|----|---------|
| % | 16 | 22 | 28 | 18 | 16 | 2.0 |

5ai.

Students could choose from a number of ill-health effects of alcohol consumption in this part; for example, alcoholic liver cirrhosis, alcoholic brain degeneration, a causal role in injuries, suicide, domestic violence, or obesity. Some students wrote that the health of families of drinkers may suffer because money is spent on alcohol rather than adequate food and housing. To earn full marks students had to name a specific health effect and describe how it affected health. Following are two examples of high-scoring responses.

Alcohol is a very high-energy dense beverage, excess consumption means excess intake of kilojoules that, if not used is stored as fat. Excess fat will contribute to obesity. Obesity is a risk factor for many diseases such as CVD, type 2 diabetes and some cancers. Therefore alcohol intake has a poor impact on health.

Increased alcohol consumption may lead to an increase in alcohol-related diseases such as liver cirrhosis. This disease decreases health status and quality of life as it is associated with considerable pain and maybe surgical procedures which may be inaccessible in developing countries.

5aai.

This part of the question asked for a consequence of alcohol intake on the development of people. Many students were unable to adequately explain this. Students could have drawn on physical development (for example, the effects of foetal alcohol syndrome), social development (for example, isolation of drinkers from family and friends impeding social interaction and ultimately limiting social development), intellectual development (for example, it may affect the development of thinking and reasoning), emotional development (for example, brain degeneration may impact as drinkers may become isolated so they do not practise and learn normal interactions with others). Following are two examples of high-scoring responses which took different approaches.

Alcohol consumption during pregnancy may cause foetal alcohol syndrome – abnormalities such as intellectual development. Abnormal facial features are an example of poor physical development. The teratogenic influence of alcohol will result in low birth weight as well as delayed physical development throughout the lifespan.

Alcohol intake may increase the likelihood of accidents such as falls and road accidents when drunk. The effects of such accidents may impair physical development eg if a person is left crippled from a road accident they are also less likely to engage socially, may have poorer self-esteem and may not work therefore this will negatively impact on social, emotional and intellectual development respectively.

Questions 5bi–ii.

| Marks | 0 | 1 | 2 | 3 | 4 | Average |
|-------|---|----|----|----|----|---------|
| % | 8 | 19 | 30 | 26 | 16 | 2.3 |

5bi.

Appropriate answers may have included the possibility of fines if the law is not followed. Higher awareness of the issue and the consequences of alcohol for young people could educate them about the dangers of alcohol consumption at a young age. This may prevent young people from drinking if alternative social activities are provided. Another approach could be that young people can learn to drive before they are allowed to legally have alcohol – zero blood tolerance – therefore they may develop safer driving strategies and skills.

Students should have given a reason why the law may decrease alcohol consumption to gain the mark. Following are two examples of appropriate student answers.

Australia as a developed country has sufficient governance to ensure such a law is enforced. Policing and the deterrence of huge financial penalties will restrict the likelihood of sales to minors which will decrease consumption.

The knowledge of such a law amongst the Australian population is likely to increase awareness of the damaging health effects of consumption and in particular of binge drinking and thus reduce consumption.

5bii.

Reasons students could have provided included:

- governments are focused on more pressing issues, such as poverty, rather than policing alcohol sales
- illicit brewing makes enforcement strategies difficult
- lack of ability/manpower and infrastructure to police the law
- governments gain money from taxes on sales, therefore money is available to satisfy other needs in the country
- high illiteracy rates may mean people do not know the law.



Following are two examples of appropriate student answers.

Governance is an issue in some developing countries as some do not have adequate government infrastructure to support such a strategy. This strategy would require policing and penalties such as monetary fines which are not possible in countries suffering from poverty.

Governments of developing countries acquire taxes and thus more revenue through the sale of alcohol. Thus the government of a poor country is unlikely to fully support such a strategy, so reduced alcohol consumption will not occur.

Questions 5ci–iii.

| Marks | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Average |
|-------|----|---|---|----|----|----|----|---|---|---|----|---------|
| % | 23 | 4 | 7 | 10 | 11 | 12 | 11 | 9 | 7 | 4 | 3 | 4.0 |

Almost a quarter of the students gained no marks for Question 5c. – often because they did not attempt to answer it.

5ci.

The aspects of primary health care that students could have used include:

- community-based health education and promotion
- access to appropriate health care, prevention and curative services – reorienting health services to prevention rather than treatment (for example, foetal alcohol syndrome awareness)
- authentic community development – developing appropriate local strategies such as community education about the effects of alcohol on development and health.

5cii.

Students had to select one of the examples from part ci. and show how it could discourage alcohol consumption. Following are two examples where students did this well.

Health education: The provision of information regarding the risks associated with alcohol consumption is likely to discourage people from drinking. Information relating to the effects of intoxication on violence and crime as well as the effects of consumption on long term health outcomes such as the development of liver cancer is likely to sufficiently inform people and discourage consumption. Also providing education regarding the effects on foetal development may discourage consumption of alcohol.

Health Education: Inform the society of the potential effects of alcohol. With knowledge and education citizens can make informed decisions. Through cultural festivals, dance, song, play the message can be delivered in a culturally appropriate manner, it also bypasses the issue of illiteracy. Targeting women may ensure that the younger generations can be taught as the knowledge is passed on.

5ciii.

Students had to identify two barriers that would make it difficult to implement one of the components identified in part ci. If they were unable to identify appropriate components in part ci. it was difficult for them to answer this part of the question. Some examples of barriers that student could have identified include:

- reorienting health services – difficult when there are so many other health issues
- illiteracy – may hamper many forms of education about the effects of alcohol on health and development
- accessing local communities for education – may be difficult in remote areas
- cost – health education may not be affordable
- lack of will – education and economic situation is low so no interest in restricting alcohol consumption.

Following are some examples of good student answers.

Health education: lack of infrastructure to implement such education makes it difficult to inform people of the health effects.

Health education: many developing countries have an unstable government that is unable to support education programs which acts as a barrier towards gaining important health knowledge.

Health education: As alcohol is being heavily promoted in developing countries it may be difficult to try to educate people on the risks as through advertising they see it as a good thing.

Health education: lack of interest – many individuals in developing countries face a daily struggle to survive. Alcohol provides a short release from this struggle and individuals may have no interest in decreasing consumption.