



**2007 Health and Human Development GA 3: Written examination**

**GENERAL COMMENTS**

The majority of students attempted all questions on the 2007 Health and Human Development examination paper, which was pleasing to see; however, Question 5 was often answered poorly or not at all. Given that a paper was circulated to all schools explaining the social model of health and the relationship with the Ottawa Charter, this result was disappointing.

Students must read each question carefully and ensure that they answer the question being asked. Many students successfully used a highlighter to note the key words in the question that indicated what they are asked to answer. Students who highlighted the whole question simply used up valuable time.

Students should use the number of lines provided and the marks allocated for each question as a guide to the depth and length of response required. It should not be necessary to use a script book, and those who did use them often added very little to their answer. Students should write their responses in pen rather than pencil, as pencil can be difficult for assessors to read.

It is important that the terms ‘health’ and ‘development’ are not used interchangeably. It is important for students to know the difference between health and development.

**SPECIFIC INFORMATION**

**Note: Student responses reproduced herein have not been corrected for grammar, spelling or factual information.** For each question, an outline answer (or answers) is provided. In some cases the answer given is not the only answer that could have been awarded marks.

**Question 1a.**

Marks	0	1	Average
%	39	61	0.6

Conception is the point where the sperm and ovum (egg) unite.

Students could have referred to fertilisation, but the mark was awarded for reference to the uniting of the egg and sperm.

**Question 1b.**

Marks	0	1	2	3	Average
%	26	17	26	32	1.7

The three stages of prenatal development are: germinal, embryonic and foetal. The first mark was awarded for use of one of these stages.

The characteristics that students could have chosen are as follows. To gain two marks, two characteristics had to be listed.

**Germinal**

- There is rapid cell division as it moves down the fallopian tube to the uterus.
- The blastocyst implants into the uterine wall.

**Embryonic**

- Cell differentiation takes place in the embryo and these cells form organs.
- Most major internal and external organs are developed.
- The limbs grow, and fingers and toes appear.
- The brain and spinal cord are almost complete.
- The internal sex organs form; stomach and kidneys function; and lungs and organs of the digestive system form.
- The head and neck are half the length of the embryo.

**Foetal**

- The placenta is fully developed and a functioning endocrine gland at 14–16 weeks.
- The foetus measures five centimetres at the beginning of this stage, and at birth it measures fifty centimetres; it grows rapidly.

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- All major organs that were formed in the embryonic stage mature, resulting in an increase in the complexity of the functioning of all body systems.
- Bones initially consist mainly of cartilage – bones begin to harden.
- Sex organs take shape.
- Movement occurs in almost all parts of the body.
- There is rapid brain development.
- Muscles and organs finish developing.
- The internal and external genitals continue to develop.
- Tooth buds form in the gums.
- Fat is deposited under the skin.
- Reflexes are highly responsive.

## Question 1c.

Marks	0	1	2	3	4	Average
%	22	31	29	12	6	1.5

### Access to health care

- Regular antenatal care helps in the early detection of health concerns such as pre-eclampsia, gestational diabetes and anaemia. This allows for early intervention to enable optimum development of the developing baby and promote the emotional health of the mother.
- Ultrasound, amniocentesis and chorionic villus sampling are medical screening tests that may be carried out to determine whether development is progressing normally or whether there are abnormalities. This can reassure the mother and improve her emotional health.

### Socio-economic status

- Higher socio-economic status provides a greater opportunity to access nutritious foods during pregnancy, which ensures that appropriate nutrients are provided for physical growth and helps to prevent diseases such as iron and folate anaemia and spina bifida.
- Higher socio-economic status can enable the purchase of private health insurance, which can provide access to healthcare outside of the Medicare system and may further promote the emotional health of the mother.

Too many students did not answer this part of the question effectively. One mark was awarded for identification of an appropriate example, but full marks were only awarded if the example referred to improving the health and development of either the mother or baby. Students who wrote about how an environmental factor impacts negatively on health and development were awarded no marks, as the question asked for improvements. Some students did not realise that the environmental factor chosen had to be one of the two mentioned in the question. No marks were awarded if this was not done.

An example of an adequate student answer follows.

*Access to health care is important for the health and development of the mother and foetus during pregnancy. It may involve having an ultrasound which can detect any irregularities in development of the foetus which may result in, for example, changes to the mother's diet therefore enhancing the physical development of the foetus. The mother's emotional health may be improved if provided with knowledge as a result of having an ultrasound that their baby is developing normally therefore leading to feelings of happiness and excitement. A blood test can determine if the mother's iron levels are adequate which can prevent iron deficiency anaemia therefore enhancing the development of the foetus. If levels are not adequate then iron supplements can be given to the mother.*

## Question 1d.

Marks	0	1	2	3	4	Average
%	60	21	10	5	3	0.7

**Pulse/heart rate:** Before birth, the blood does not have to pass through the lungs to pick up oxygen. The chambers of the heart are open and blood passes easily from right to left. At birth the chambers close over (foreman ovale) and the blood flows in a circulatory pattern from the lungs to the left chamber of the heart and to the body cells, returning to the right side of the heart and to the lungs to be replenished with oxygen.

**Respiration:** Before birth oxygen comes from the placenta. At birth the neonate must inhale and exhale. During the last few weeks of the prenatal stage, the lungs produce surfactant, a substance that prevents the lungs from collapsing in between breaths. The oxygen supply is cut off when the umbilical cord is cut, and the neonate must take its first breath.

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The lungs inflate and any liquid in the lungs is squeezed out and absorbed into the blood stream and the lungs become fully functional.

Few students were able to answer this question, which asked them to describe the adaptations that occur in the first five minutes after birth.

An example of a good student answer is provided below.

*Pulse/heart rate – Before birth the foetus’s heart has a hole between the top two chambers which enables blood to bypass the non-functioning lungs. However, once the umbilical cord has been cut and the lungs are being utilised, the force of the blood pressure causes the flap to cover the hole between the chambers of the heart and circulate blood to the lungs to receive oxygen that is distributed to body cells.*

*Respiration – Before birth the foetus relies on the placenta to receive oxygen and remove carbon dioxide via the umbilical cord. In the last few weeks of the foetal stage surfactant is produced which is necessary for the function of the lungs which are currently deflated. After birth, once the umbilical cord is cut the neonate must begin to breathe through the use of its lungs. 85% of the fluid in the lungs is expelled during birth and any remaining is absorbed soon after birth. The neonate has usually adapted to breathing 5 minutes after birth, explaining the increase in the AGPAR score for respiration.*

### Question 2ai.

Marks	0	1	Average
%	2	98	1.0

Mental disorders

Almost all students gave the correct answer.

### Question 2aii.

Marks	0	1	2	3	Average
%	20	16	39	26	1.7

One mark was awarded for stating that years lost due to disability (YLD) contributed more to DALYs than years of life lost due to premature death (YLL). Two marks were awarded for the explanation.

The following student answer achieved full marks.

*It is most likely to contribute to DALYs through healthy years lost due to disability because mental disorders are a psychological and usually non-fatal disease possibly resulting in reduced functioning therefore contributing to YLD. It can contribute slightly to YLL as a result of committing suicide due to their feelings of depression.*

### Question 2bi.

Marks	0	1	Average
%	44	56	0.6

Health status refers to the level of health of an individual or population.

### Question 2bii.

Marks	0	1	2	3	Average
%	11	31	35	23	1.7

Students should have reached the conclusion that males have a poorer health status than females in all age groups except the 75+ category, and then used information or examples from the table to support their conclusion. Appropriate answers that could have been given included the following.

- Older males aged 55+ have higher rates of cancer than do females in the same age groupings.
- The rate of diabetes amongst males aged 55–74 is higher than for females in the same age category.
- Mental disorders are more common in males between 15 and 34 than for females in the same age grouping.
- Males in all categories between 15 and 74 years are more likely to suffer from cardiovascular disease than females in the same age categories.
- Women are more likely than males to suffer from musculoskeletal diseases in all age categories.
- Males are more likely to be affected by injuries than females, with the exception of the 75+ age category.

Specific statistics from the table did not have to be cited, but students should have used them to guide their answer.

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## Question 2biii.

Marks	0	1	2	3	4	Average
%	19	18	29	21	12	1.9

Students were awarded one mark if they explained reasons for the differences, but in order to gain full marks they had to refer to the broad disease groupings that were set out in Table 2. Some examples that students could have used included the following.

- Biomedical: Men are more likely to have higher blood pressure and higher blood cholesterol levels which will contribute to higher levels of cardiovascular disease.
- Genetic contribution: Testosterone can increase the risk of cardiovascular disease; fat tends to be deposited around the abdomen of males which increases their risk of cardiovascular disease; oestrogen decreases the risk of cardiovascular disease for women.
- Lifestyle and behaviour: Men have higher rates of smoking which increases the risk of cancer and cardiovascular disease; males tend to eat a poorer diet which increases their risk of some cancers, cardiovascular disease and diabetes; men are more likely to take risks which increases their rate of injuries.
- Attitudes and beliefs: Men have less health awareness than women, which increases their risk in all disease categories except musculoskeletal diseases; men view seeing a doctor as a weakness therefore reducing the likelihood of early detection of cancer, diabetes, mental disorders and cardiovascular disease.
- Environment: Men often have riskier jobs and are encouraged to take greater risks, which increases the rates of injury.

Following is an example of an excellent student answer.

*Lifestyle/behaviour – Men generally display more risk-taking behaviour than women eg. binge drinking, driving at high speeds. Their behaviours may lead to increased rates of injuries, eg car accidents which could possibly result in premature death therefore contributing to DALYs attributable to injuries.*

*Attitudes and beliefs – Males often believe that going to the doctor is embarrassing or is a sign of weakness. This could potentially cause diseases such as cardiovascular disease or cancers to go undetected or be diagnosed later into their development. As such this may contribute to males having poorer health outcomes than women.*

## Question 3a.

Marks	0	1	2	3	4	Average
%	19	20	37	12	12	1.8

Possible answers included:

- to provide for optimal development to achieve genetic potential
- an increasing number of children are becoming overweight or obese
- an increasing number of children have a distorted body image
- good nutrition during childhood can protect against chronic diseases later in life – such as type 2 diabetes and cardiovascular disease.

Students needed to expand on these ideas, as the excerpts below show. Many students did not read this question carefully. The focus was on the key initiative – promoting good nutrition for school-aged children – not on the parents. No marks were awarded for answers that focused on parents.

*Through promoting good nutrition for school-aged children their physical health can be improved as they have energy, resistance to diseases and it fosters a healthy BMI thereby decreasing the likes of obesity which can be a risk factor for many diet-related illnesses including cardiovascular disease.*

*Children may lack the nutritional knowledge about the benefits of consuming fruits and vegetables can have for their health and their physical development and therefore they may consume energy dense foods instead which can lead to developing many diet-related diseases, eg obesity. If children are educated about good nutrition it may protect them from diet-related diseases in the future.*

*Children are often targeted by the media through television advertisements for energy dense foods and are easily influenced by these promotions and consume these foods which may result in obesity and contribute to the rising rates of obesity in school aged children. Good nutrition needs to be promoted to these children to prevent the obesity epidemic from further escalating.*

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## Question 3bi.

Marks	0	1	2	3	4	Average
%	15	27	37	14	6	1.7

There are many strategies that could be introduced, including:

- Go for 2 and 5
- Go for Your Life
- Kids Go for Your Life
- Dietary Guidelines for Children and Adolescents
- nutrition programs in schools
- body image and eating disorder programs
- healthy school canteen policies/programs
- review of the Code of Advertising during children's television
- Kids in the Kitchen Project
- market gardens in schools
- Food Dudes to the Rescue
- traffic lights in labelling.

Students had to name a strategy for one mark and provide at least three characteristics that described the strategy for the remaining three marks. Students were not awarded marks for describing the benefits of the strategy. If the name of the strategy was vague, the student did not receive a mark for the name of the strategy but may have received up to two marks for the description if it clearly related to promoting good nutrition for school-aged children.

Following are two excellent student responses.

*Go for 2 and 5 – fruit and vegetable consumption. The Go for 2 and 5 aims to increase the fruit and vegetable intake in school-aged children. It aims to promote awareness of the benefits of consuming a healthy diet and how fruit and vegetable intake can act as a protective factor for many diet-related diseases including obesity and type 2 diabetes. Through implementing this program in schools a supportive environment approach is provided which should improve the effectiveness of the program.*

*Reviewing school canteen menus to provide healthier options. Governments should review canteen menus nation-wide to ensure that only nutritious, healthy meals and snacks are available for children to buy. This should encourage good nutrition and eating habits in order to reduce the risk of childhood obesity. Along with this students should be educated in mandatory nutrition education classes so that they are aware of the benefits of healthy food choices so they are more likely to support the new canteen options.*

## Question 3bii.

Marks	0	1	2	Average
%	68	25	8	0.4

Possible answers included:

- a decrease in the incidence of childhood overweight and obesity rates
- healthier eating behaviours for school-aged children and their parents
- improved attitudes towards the importance of healthy eating
- better understanding of what constitutes healthy eating and its relationship to short- and long-term health.

Many students appeared to not understand the word criteria and either left this question unanswered or answered inappropriately. The students had to refer to measuring how successful the strategy has been, not to predictions of how it might be effective. The Ottawa Charter priority areas could have been used but had to be framed in relation to the capacity to evaluate the effectiveness, not used as a descriptive approach.

The response below used the above criteria effectively.

*Measure if the amount of fruit and vegetables consumed by school-aged children increase after implementation of this program.*

## Question 3c.

Marks	0	1	2	3	4	Average
%	45	19	25	5	6	1.1

Students had to do more than indicate that Nutrition Australia educates parents/children. They had to indicate, for example, **how** they provide this education. Possible answers that the students could have drawn on included:

- promoting the Healthy Living Pyramid (or Healthy Eating Pyramid), which educates children, parents and teachers about the proportions of food that should be eaten from each of the food groups at each level of the pyramid
- working with schools to run healthy eating programs for children, parents and teachers
- providing dietary advice for appropriate foods that could be sold in the school canteen
- providing nutrition and dietary advice for children that can be included in a parent newsletter to promote healthy eating for children
- conducting National Nutrition Week each year, which focuses on a particular theme around nutrition and can be used to promote healthy eating for school-aged children, such as increasing the intake of fruit and vegetables
- providing nutrition resources for teachers, which can be used in the classroom to educate children on the importance of eating a healthy food intake
- providing a comprehensive website that can be used by parents, teachers and children to seek out information on healthy eating.

Too many students knew little about Nutrition Australia, even though it is included in a point of key knowledge in the study design.

This following student response gained full marks.

1. Nutrition Australia provides healthy and fun recipes for children to make, available on their website, that help make consuming nutritious foods fun and enjoyable which can encourage school-aged children to consume these foods through making the recipe.
2. Nutrition Australia has a food model, Healthy Eating Pyramid, which can be promoted in schools and encourages least consumption of foods from the top group (energy dense foods) and higher consumption of foods in the bottom level of the pyramid (nutritious foods). It is simple and easy to understand for school-aged children and may help them make sound food choices if they know what proportions to eat of which types of foods.

### Question 3d.

Marks	0	1	2	3	4	Average
%	72	4	8	8	9	<b>0.8</b>

There was a limited number of possible answers based on the health gains identified by SIGNAL. Students had to link the health gain back to reducing the burden of disease in Australia. The most appropriate health gains were:

- preventing overweight and obesity (Promoting Healthy Weight) – this will reduce the burden of disease as obesity is a risk factor for many diseases such as cardiovascular disease, colorectal cancer, type 2 diabetes, asthma, mental disorders and arthritis, all of which contribute to a significant burden of disease in Australia
- increasing the consumption of vegetables and fruits – this will reduce the burden of disease associated with cardiovascular disease, colorectal cancer and iron and folate deficiency anaemia. Vegetables and fruit also contribute to increased fibre intake which will reduce diseases such as constipation and haemorrhoids. Vegetables and fruits are also good sources of vitamin C, which can help promote a healthy immune system which could prevent colds and infections.

Other health gains or priorities that students could have included were:

- improving nutrition for vulnerable groups (for example, indigenous people or the elderly)
- addressing structural barriers to safe and healthy foods.

This question was not answered well. Too many students showed no understanding of the health gains included in the *Eat Well Australia* plan. Students were awarded one mark for recognising the health gain and up to three marks for their explanation of how it could contribute to a reduction in the burden of disease referring to specific illnesses.

The following response answered the question very well and gained full marks.

*Increase the consumption of fruit and vegetables. Through increasing the consumption of fruit and vegetables, people will be consuming much less processed varieties of foods including ones with saturated fats, salt and sugar which all contribute to diet-related diseases such as cardiovascular disease, some cancers, type 2 diabetes, thereby reducing the burden of disease in Australia. Eating fruit and vegetables also provides the body with many protective nutrients including fibre and antioxidants which reduce diet-related diseases such as colorectal cancer, therefore decreasing the burden of disease. Fruits and vegetables also leave the individual feeling full, therefore excess food consumption will be lowered and the risks of obesity, which contributes to diet-related diseases, will be reduced.*

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## Question 4a.

Marks	0	1	2	Average
%	31	36	33	1.0

AusAID is Australia's official overseas aid agency that provides assistance to developing countries.

Far too many students did not know what AusAID is, despite it being included in a point of key knowledge in the study design.

## Question 4b.

Marks	0	1	2	Average
%	28	40	32	1.1

Education Programs for HIV/AIDS

- provide funding to non-government organisations (NGOs) to implement the programs
- provide personnel and experts to help deliver education programs (students could not just use 'education' as the contribution, as this was just restating the program)
- assist governments in developing health policies

Landmine clearing

- provide funding to NGOs to disarm landmines
- provide personnel and experts to train local workers to disarm landmines
- provide support and encourage governments to address the need to clear landmines

Small business projects for women

- provide funding to NGOs to implement the project
- provide personnel and experts to help develop women's skills
- assist governments in developing policy and practices that create opportunities for women to be involved in small business projects

The following response gained two marks.

*Education programs for HIV/AIDS – AusAID is particularly concerned with halting the spread of HIV/AIDS in the Asia-Pacific region. It was involved, for example, in the 'National Highway One' program to educate Vietnamese truck drivers about the importance of safe sex to prevent HIV/AIDS. AusAID supplied the money and assistance to both government and non-government agencies to carry out the project.*

## Question 4c.

Marks	0	1	2	3	4	Average
%	30	25	23	11	10	1.5

Students had to identify the specific type of development **and** health in their justification of the program. Two marks were allocated for each of these in the answer. For example, students needed to explain one example from each, as shown in the example below.

Education programs for HIV/AIDS

- Health: reduces the incidence of HIV/AIDS; improves physical health by reducing the risk of diseases (such as respiratory infections, diarrhoea, fever) due to poor immunity; reduces guilt and shame associated with HIV infections by improving emotional health; improves social health as a result of reduced illness and stigma attached to HIV/AIDS.
- Development: Intellectual development will be improved with greater opportunities to attend school or work; increased self-esteem and confidence as a result of improved health – emotional development; physical development will be improved as motor skills will be optimised; improved health and better functioning body systems will enable optimal growth – physical development

The following excellent answer followed on from the student example provided in Question 4b. above.

*Health – physical. As the truck drivers are educated about the risks of HIV/AIDS they may be more likely to change their behaviour, eg. Start using condoms, to prevent the development of HIV/AIDS which may enhance their physical health as are free from the disease.*

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*Development – Social – If truck drivers do not develop HIV/AIDS as a result of their education about the risks of this they will be more likely to involve themselves in social activities eg. neighbourhood meetings, as they are not infected which will increase their interactions with their neighbours therefore improving their potential to form social relationships.*

## Question 5a.

Marks	0	1	2	Average
%	73	19	9	<b>0.4</b>

Students could have used any of the following four principles:

- inter-sectoral collaboration
- reducing social inequities
- empowering individuals and communities
- access to health care.

Social and environmental determinants could not be used as they formed part of the question. It was disappointing that so many students were unable to provide an answer for this question given that a support paper was distributed to all schools by the VCAA about the Social Model of Health.

## Question 5b.

Marks	0	1	2	3	4	5	6	Average
%	27	4	9	11	16	17	16	<b>3.0</b>

Students had to name the action areas of the Ottawa Charter accurately. Any of the five priority action areas were awarded one mark each (up to two). A further two marks for each priority area were available for providing examples evident from the health initiative.

The examples of Strengthening Community Action were:

- a community-based group was established
- it involved patients, families and the local community health service
- transport was provided
- it included members of the Aboriginal community
- it was culturally appropriate.

Examples for Reorient Health Services were:

- funding was provided for the community-based aboriginal diabetes group rather than allocated to a biomedical approach
- patients who presented at the Community Health Centre were invited to attend the program with their families.

Healthy Public Policy is not evident in the health initiative. Many students did not use information in the passage provided and therefore were not awarded any marks for the description.

The following student responses show what was required to gain full marks.

*Creating Supportive Environments – The indigenous participants of this group were made to feel comfortable, sharing understandings about diabetes and helping other group members. They were provided with transport to and from the meetings and also prepared a healthy meal together. Because the environment that they were in was supportive and encouraging the indigenous people would be more likely to change their lifestyle and nutritional choices and this would deem the initiative a success because the group members would feel empowered.*

*Developing Personal skills – Education was used to give the indigenous people knowledge and skills to empower them to manage their own health and diabetes. A visual poster was used to help families understand diabetes and the participants were encouraged to ask questions so as to gain greater knowledge. Learning to measure blood glucose levels is important for assisting them to manage their health. This means that the participants would be more likely to feel empowered to change their lifestyles and manage their own families' health because they are aware of the benefits.*

## Question 6a.

Marks	0	1	2	Average
%	7	9	84	<b>1.8</b>

Students could choose two of the following differences in key indicators:

- life expectancy in Sudan is 23 years less than in Australia

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- healthy life expectancy in Sudan is 49.9 compared to Australia where it is 74.3
- child mortality for females in Sudan is 84 per 1000 compared to Australia where it is 5 per 1000
- adult female mortality in Sudan is 304 per 1000 whereas in Australia it is 50 per 1000
- total health expenditure as a percentage of GDP is 4.3% in Sudan whereas in Australia it is 9.5%.

No mark was awarded to students who used literacy rates for females, as no number was provided in the table for Australia. Students needed to make a specific comparison to gain any marks.

## Question 6b.

Marks	0	1	2	Average
%	9	22	69	1.6

Life expectancy refers to the number of years a person would be expected to live given the current conditions (quantity of life) while healthy life expectancy refers to the number of years a person would be expected to live without significant disability (quality of life).

The majority of students answered this question well.

## Question 6c.

Marks	0	1	2	3	4	Average
%	9	21	41	18	12	2.1

Students had to compare Sudan and Australia in each of the two reasons they described to obtain maximum marks. Many students did not make a comparison. Students could have drawn on poverty, illiteracy, cultural factors, lack of access to primary health care, war and conflict to help explain the differences in healthy life expectancy.

The following clear answers from students show what could be written to gain full marks.

*In Australia there is good access to health care meaning that people are less likely to suffer from diseases such as cholera and if they do they have access to medical/health facilities to manage the symptoms. In Sudan less of the GDP is spent on health than in Australia so the women would have less access to health care facilities and are likely to have their quality of life affected.*

*Females in developing countries like Sudan also work extremely laborious hours and partake in very physical, dangerous work compared to most women in Australia and therefore their healthy life expectancy is lower as they are more likely to develop diseases due to a depressed immune system from exhaustion and sustain injury from the type of work they do.*

*For women in Australia it is compulsory to attend school until the age of 15 resulting in a sound knowledge of hygiene practices. However women in Sudan may be living in poverty and may not be sent to school therefore they may lack the health and hygiene knowledge and the importance of boiling water before use in cooking or drinking to protect from water borne viruses and bacteria which are communicable and can spread from person to person possibly resulting in reduced functioning and therefore a lower healthy life expectancy for females.*

*In developing countries like Sudan women are often valued less than men and are the primary care givers for their families which may involve very labour intensive work eg collecting firewood, working in fields which can impact on physical development and lead to skeletal problems which may result in reduced functioning therefore may lead to a lower healthy life expectancy. Women in Australia are more valued and are not required to do hard labour resulting in a higher healthy life expectancy.*

## Question 7a.

Marks	0	1	2	3	4	Average
%	27	21	22	19	11	1.7

Students should have drawn on examples similar to those shown below.

### Physical Development

- This is a period of non-growth and body cell maintenance.
- There is no further growth in height but some completion of bone growth and reproductive organ growth continues during pregnancy.
- Sexual maturity is achieved and it is usually a time of sexual activity and reproduction.
- The sensory organs are at their sharpest – sight and hearing are at their peak at about 20 years.
- It is a time of peak physical status – body systems and organs reach optimum functioning.
- Peak bone mass is reached at around 30 years.

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## Social Development

- Young adults face many decisions relating to sexuality.
- A range of experiences brings about new relationships, behaviours, attitudes, adjustments to new roles and associated responsibilities.
- Communication skills continue to develop in a range of settings.

## Emotional Development

- Changes in family and environment can result in young adults facing positive and negative emotional responses.
- Coping with the various changes in life helps build a sense of self and may have a positive or negative impact on self-esteem.
- Young adults continue to search for an identity, especially in their roles in the workplace.
- Interacting with different social groups and having to get along with colleagues increases sensitivity towards others.

## Intellectual Development

- Language skills and knowledge improve as adults work.
- Experiences gained over time lead to a deeper understanding of people and the world.
- The ability to problem solve and to predict in an abstract way continues to develop in adults who are challenged to use these skills.

As in previous examinations, students showed a relatively poor knowledge of development appropriate for young adult women. Too many students used examples from the adolescent life span stage.

### Question 7b.

Marks	0	1	2	3	4	Average
%	44	26	21	6	3	1.0

Possible points that could have been used included:

- growth of soft tissue (for example, muscles) and hard tissue (for example, long bones) may be compromised and deformities may occur
- fine and gross motor skills may not develop at the expected rate due to slower muscle and bone growth and development
- eye sight may be poor due to a lack of vitamin A
- reduced bone density and strength may lead to reduced ability to participate in physical activities, thereby reducing motor skills.

Too many students were unable to answer this question. Many talked about pregnancy and physical development but did not relate it to undernutrition.

These following student responses answered the question well.

*If inadequate amounts of iron are consumed by young adults it may result in iron-deficiency anaemia as iron is required for the formation of haemoglobin in red blood cells to transport oxygen around the body and if it is lacking it may result in fatigue, delayed growth as not enough oxygen is supplied to body cells therefore impacting on physical development.*

*Undernutrition can result in a lack of calcium mineralisation and deposition in the bone matrix therefore young women's bones become weaker, decrease in strength and are more susceptible to breaks and fractures. Bone density decreases and a lack of calcium and fluoride through undernutrition may also cause the health and development of teeth to deteriorate.*

### Question 7c.

Marks	0	1	2	3	4	Average
%	19	15	30	17	20	2.1

Students had to relate their description to the capacity of women and children, not just the population in general, to access food to get full marks. Possible answers included:

- most casualties of war are women and children who are often killed or permanently disabled or injured, making it difficult for women to care for their families and work to earn an income to buy food or work in the fields
- fields are bombed or landmines are laid, making the land unavailable for farming for food
- available food is often allocated to the soldiers, usually men, leaving little or none for women and children.

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Below are some clear student responses to this question.

*Crops may be destroyed in the conflict or women may be forced to flee their homes, abandoning crops, gardens or vegetable patches that they rely on to feed their families. As women are often responsible for the upkeep and working of land and crops and feeding children.*

*Ongoing conflict can lead to the government spending all their money and resources on military purpose and the high expenditure that comes with weapons and military aid. Therefore there is less money for the country to provide adequate food supply hence the availability of food for women and children may become scarce as the armies of soldiers will receive the food as they are given higher priority.*

## Question 7d.

Marks	0	1	2	Average
%	31	28	41	<b>1.1</b>

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.

Following is an example of an excellent answer that scored full marks.

*Cultural factors in developing countries such as Sudan may result in women being seen as less privileged and not important in comparison to males therefore they are not given as much food compared to males in the family hence impacting on availability to food for women.*

## Question 7e.

Marks	0	1	2	Average
%	49	28	23	<b>0.8</b>

Possible points that could have been used included:

- weakening of the body's immune system leading to increased risk of disease
- fatigue and lack of energy
- underweight, as children do not have sufficient food
- poor dental health as insufficient calcium and protein are consumed
- anaemia due to iron deficiency resulting in fatigue and lethargy.

Too many students did not read the question carefully and answered the question in relation to the development, instead of the health, of children. They received no marks.

The following student responses answered the question well.

*If children are malnourished they may have a weakened immune system which makes them more susceptible to disease eg infections, diarrhoeal diseases, therefore impacting on the physical health of the children.*

*If children are not obtaining adequate nutrition such as protein, carbohydrate, vitamins A and C, they will have a much poorer physical health. They will have less resistance to disease including marasmus, contracting infectious diseases such as influenza because their immune system is depleted.*

## Question 7f.

Marks	0	1	2	3	4	Average
%	14	27	33	16	10	<b>1.8</b>

Suggested material for answers included the following.

- In Sudan, women do not have access to health insurance system such as Medicare.



- Medicare enables women to access free treatment as a public patient in a public hospital and free or subsidised treatment by practitioners such as doctors, including specialists, participating optometrists and dentists (that is, some services).
- Under the Pharmaceutical Benefits Scheme, all Australian women have access to necessary and life-saving medicines at an affordable price.
- Medicare covers a wide range of health services, both in a public hospital (inpatient services) as well as out of hospital services (outpatient services).
- Medicare is significant in contributing to increased life expectancy and healthy life expectancy, as providing all Australian women with free or subsidised access to a range of health care services means the diagnosis, treatment and curing of diseases is possible and healthy life expectancy is increased.
- Sudanese women have lower life expectancy and healthy life expectancy because the Sudanese government spends less of the GDP on health and has no system comparable to Medicare that would give women access to appropriate medical care.

Too many students gave very general responses that just stated that because of Medicare Australians have better health, without explaining how Medicare allows this. Many students just added at the end that Sudan does not have Medicare therefore their health was bad, making no mention of life expectancy. Students had to make comparisons between Australian and Sudanese women and relate the discussion to life expectancy or healthy life expectancy.

The following full responses gained full marks and covered a number of the points listed above.

*Medicare enables health access to all Australians. It makes health care services affordable and tries to make them accessible. Therefore women in Australia are more likely to be aware of the health promoting behaviours thereby reducing their risks of developing diet related diseases such as cardiovascular disease which would decrease life expectancy. Women in Australia are also likely to access medications and other health care services hence we see a higher healthy life expectancy compared to women in Sudan who cannot access affordable health care like Medicare. These women have to suffer poor physical health or illness and cannot obtain medication therefore will have a decreased life expectancy and lower healthy life expectancy.*

*Medicare enables Australian women to access health care at subsidised, cheaper rates. Therefore women are more likely to access medical facilities and have diseases such as cancer diagnosed and treated and maybe cure so as to prevent premature death. Many women in Sudan cannot afford to access medical facilities because they are not covered by a health care system such as Medicare. Therefore, diseases like cancer are more likely to go undiagnosed or untreated leading to premature death. This may explain why life expectancy in Sudan for females is far lower than that of Australian women.*