2016 HSC
Personal Development, Health and Physical Education Marking Guidelines

Section I, Part A

Multiple-choice Answer Key

Question	Answer
1	B
2	D
3	C
4	B
5	C
6	A
7	D
8	A
9	B
10	C
11	D
12	A
13	C
14	D
15	D
16	B
17	C
18	A
19	D
20	A

Section I, Part B

Question 21

Criteria	Marks
• Describes the difference between complementary and alternative therapies • Provides examples that indicate the difference between alternative and complementary therapies	5
• Sketches in general terms the features of complementary AND/OR alternative therapies • Provides relevant example(s)	3–4
• Indicates feature(s) of complementary AND/OR alternative therapies • Provides an example	2
• Provides some relevant information about alternative or complementary health therapy	1

Sample answer:

A complementary therapy is used alongside a conventional medical treatment. An example of complementary therapy would be if a patient underwent acupuncture along with chemotherapy to assist with the discomfort of cancer treatments. An alternative therapy is when a patient uses a non-conventional approach to treating a disease in place of conventional medical treatment. An example of alternative therapy would be choosing to take a homeopathic remedy instead of a prescribed medication for breast cancer.

Question 22

Criteria	Marks
• Makes evident the relationship between the determinants and the health inequities in the context of ONE priority population group other than Indigenous Australians • Provides examples that demonstrate the relationship between the determinants and the health inequities experienced by the group	7
• Provides characteristics and features of the determinants that create health inequities experienced by ONE priority population group other than Indigenous Australians • Provides relevant examples of the determinants that create the health inequities experienced by the group	5–6
• Provides characteristics and features of a determinant that creates health inequities experienced by ONE priority population group other than Indigenous Australians OR • Sketches in general terms determinants that create the health inequities experienced by ONE priority population group other than Indigenous Australians • Provides relevant example(s)	3–4
• Sketches in general terms about determinant(s) that create health inequities OR a priority population group that experiences health inequities	2
• Names a determinant of health inequities OR a priority population group other than Indigenous Australians	1

Sample answer:

Individuals from low socioeconomic backgrounds suffer higher rates of chronic diseases including CVD, cancer and diabetes type II, as well as higher rates of injury and mental health issues. Socioeconomic determinants of education, income and employment can contribute to these inequities. Lower levels of education can lead to unhealthy lifestyle choices and increased consumption of high fat diets, contributing to increased prevalence of obesity, CVD and cancer. Lower levels of education can also lead to unemployment or reduced employment opportunities, which then reduces income, and can limit the affordability of choices such as getting a gym membership to engage in regular exercise. Environmental determinants including geographical location can limit an individual's access to technology and health services. People of low socioeconomic status may live in rural areas with limited access to advanced diagnostic testing and technology eg CT scans and breast screening, which can then increase their chance of death from some cancers due to late diagnosis. Sociocultural factors including media, culture, religion, peers and family can have an impact on health inequities. People with low socioeconomic status are more likely to learn poor lifestyle decisions and risk behaviours through peers and family which can contribute to higher risk-taking behaviours eg, tobacco smoking which can lead to lung cancer or increased injuries resulting in hospitalisation. Furthermore, people from low socioeconomic backgrounds may lack access to media health promotion initiatives which can limit their protective factors, contributing to increased lifestyle diseases such as lung cancer.

Question 23

Criteria	Marks
• Makes judgement(s) about the influence the Ottawa Charter has had on health promotion initiatives in Australia • Makes relationships between the action areas of the Ottawa Charter and Australia's health promotion initiatives evident • Provides examples that support the judgement made	8
• Makes relationships between action areas of the Ottawa Charter and Australian health promotion initiatives evident • Provides examples that support the relationship between the Ottawa Charter and Australian Health promotion initiatives	6–7
• Provides characteristics and features of how action areas of the Ottawa Charter have been used in health promotion initiatives in Australia OR • Provides characteristics and features of health promotion initiative(s) in Australia	4–5
• Sketches in general terms about action areas of the Ottawa Charter OR • Sketches in general terms about health promotion initiative(s) in Australia	2–3
• Provides some relevant information about health promotion	1

Sample answer:

The five action areas of the Ottawa Charter (OC) heavily influence a range of health promotion initiatives in Australia. The Healthy Schools Canteen (HSC) initiative and the National Tobacco Strategy (NTS) have been shaped by this framework to effectively target the cancer and Cardiovascular Disease (CVD) national health priority issues (NHPIs).

'Developing personal skills' focuses on the promotion of health literacy which will enable individuals to make informed health decisions. This area guides the HSC by encouraging schools to use a simple 'traffic light' system of grading the nutritional value of food items. For example a sausage roll would be allocated a red sticker to inform any student, regardless of their age or background, about its high fat/poor food quality and to only eat it on rare occasions. The knowledge provided through this system, acts as a protective factor for young people against CVD and cancer which are leading causes of death in Australia. It is clear that this heavily influences and ensures the success and value of the health promotion initiative.

'Creating supportive environments' ensures that the places where people, live, work and play are conducive to making positive health decisions. This successfully influences the NTS initiative which creates smoke-free environments for people in employment, education and recreation. Smoking is no longer permitted near public and private eating areas and playgrounds. This ensures people are not exposed to excessive second-hand smoke and makes it difficult for addicted people to engage in the risk behaviour. This action area has also influenced the HSC initiative. The entire notion of adopting a healthy canteen transforms the only food choice for many young people from a high fat one to a healthy, low fat one. This makes the school environment more supportive of strong overall health outcomes for Australia's youth and reduces the risk of chronic diseases linked to poor diet. It is clear that 'creating supportive environments' successfully influences health promotion in Australia.

Question 24 (a)

Criteria	Marks
• Indicates the main features of all stages of skill acquisition	3
• Indicates the main features of some stages of skill acquisition	2
• Names stage(s) of skill acquisition	1

Sample answer:

A cognitive learner performs slow, uncoordinated movements, making large errors while gaining an understanding of the skill. An associative learner understands how to do the skill, performs it with increased speed, still makes a few errors, but can recognise and correct some errors. An autonomous learner performs the skill automatically with fluency and very few errors. They can focus on other aspects of performing the activity.

Question 24 (b)

Criteria	Marks
• Indicates the types of feedback that are appropriate at each stage of skill acquisition • Provides examples that support the use of feedback at each stage	4
• Indicates the types of feedback that are appropriate at stages of skill acquisition • May provide example(s) of types of feedback	2–3
• Provides some relevant information about feedback	1

Sample answer:

The type of feedback appropriate at the cognitive stage would include external and knowledge of performance eg a coach giving verbal feedback after a basketball lay-up to correct the technique for arm extension.

Associative stage should use external, delayed and knowledge of performance eg a coach and athlete watching a video and critiquing the technique of their back swing in a forehand shot.

The feedback used by an athlete at the autonomous stage is internal, concurrent and knowledge of result eg a tennis player 'feeling' the extension of the arm was not optimal and modifying future performances or a basketball player watching their attempt at a three point shot moving through the air and into the basket, indicating success.

Question 25

Criteria	Marks
• Shows the differences between valid tests and reliable tests of athletic performance • Provides example(s) that indicate the distinction between valid tests and reliable tests	5
• Sketches in general terms the features of valid tests and reliable tests of athletic performance • Provides an example of a valid test OR a reliable test	4
• Indicates the main features of a valid test AND/OR a reliable test	2–3
• Provides some relevant information about valid tests OR reliable tests	1

Sample answer:

A valid test of athletic performance is one that measures exactly what it was designed to measure. For example, if you want to measure speed, it would be better to time an athlete over a 50 m sprint than conduct a vertical jump test. A reliable test of an athletic performance is a test that you can rely on to measure something consistently or repeatedly. For example, you may time how long it takes to run around the same oval every day as a measure of aerobic fitness. While this may not be entirely valid it is pretty consistent and will show improvements in performance very reliably.

Question 26

Criteria	Marks
• Provides arguments to support the psychological strategies used by athletes to enhance their motivation and manage anxiety • Relates cause and effect between the psychological strategies and their ability to enhance motivation and manage anxiety	8
• Provides characteristics and features of relevant psychological strategies that enhance motivation and manage anxiety • Makes the relationships evident between psychological strategies and their ability to enhance motivation and manage anxiety	6–7
• Provides characteristics and features of psychological strategies that enhance motivation and manage anxiety • Provides the effect of psychological strategies on their ability to enhance motivation AND/OR manage anxiety	4–5
• Sketches in general terms a psychological strategy(ies) that manages anxiety AND/OR enhance motivation	2–3
• Names a psychological strategy used to enhance motivation OR manage anxiety OR • Provides some relevant information	1

Sample answer:

Athletes enhance their motivation and manage anxiety by using the following psychological strategies: concentration/attention skills, mental rehearsal, visualisation, imagery, goal setting and relaxation techniques.

Goal setting is initially used at the start of the training year to set realistic objectives and performance expectations. This increases levels of motivation resulting in adherence to training schedule and intensity required for improved performance. An athlete who is bored and lacking direction will benefit from goal setting, resulting in a greater interest and focus in training, which will then improve an athletes performance.

Relaxation techniques such as progressive relaxation can assist an athlete whose performance suffers due to high levels of anxiety. High levels of anxiety can lead to: tense muscles, muscular fatigue and reduced focus. Progressive relaxation before an event helps to reduce muscle tension and improve focus so that performance is improved or at an optimal level, instead of being affected by a high level of anxiety.

Mental rehearsal involves recreating in your mind a mental image of yourself successfully practising a skill or movement performance. This increases an athlete's familiarity with the skill, increasing confidence and reducing anxiety. Mental rehearsal would definitely benefit an athlete at who lacks confidence and has a high level of anxiety, thus improving their performance.

Section II

Question 27 (a)

Criteria	Marks
• Recognises the sociocultural and individual determinants that adversely affect the health of young people • Makes the relationship clearly evident between a range of factors associated with the individual and sociocultural determinants and the health of young people • Uses examples to support the relationship	8
• Recognises the sociocultural and individual determinants adversely affecting the health of young people • Provides characteristics and features of these determinants that affect the health of young people • Provides relevant examples	6–7
• Recognises sociocultural AND/OR individual determinants related to the health of young people AND/OR • Sketches in general terms the determinants of health affecting young people • May provide examples	4–5
• Recognises and names the determinants of health affecting young people	2–3
• Provides facts or information on the determinants of health affecting young people	1

Sample answer:

Young people experience overall good health. However, there are a few areas like motor vehicle injuries, sexually transmitted infections, obesity, alcohol-related injuries, violence, depression and suicide which are all affecting young people's health in an adverse manner. Young people face many health determinants which contain a range of factors that can contribute to this negative impact on health. Two of these health determinants are individual factors and sociocultural factors. The more factors a young person encounters, the greater the impact on their health.

Individual factors relate to a young person's predetermined genetic make-up, sexual orientation and gender, as well as their personal skills, knowledge and attitudes. These can adversely affect a young person's health. For example, young males experiences more injuries than young females. This can be attributed to their higher risk-taking attitudes and their nature to be easily influenced by others. Young males are more likely to be involved in a motor vehicle accident than any other age group, with contributing factors to these accidents including alcohol use, speed. Also, a young person who is struggling with their sexual orientation, if it is different from their friends and family, is more likely to suffer depression and turn to drugs or alcohol to escape from their stress.

Sociocultural factors relate to the influence of family, peers, media, religion and culture on a young person's health. If a young person's family has lack of knowledge on healthy eating and exercise, and provides meals of poor nutritional value and limited physical activity opportunities, it is more likely have passed on these poor health patterns to their young people. In turn they have contributed to the increasingly sedentary behaviour of young people

and high obesity levels. Additionally young people are highly influenced by their peers and media, especially social media, and will partake in poor health behaviours in an attempt to stay cool with their peers. For example participating in binge drinking, as it is seen as a norm among young people, even if the health risks are known. Similarly, participating in unprotected sex as young people feel pressure to conform to the expectations of their peers. This contributes to the increase of sexually transmitted diseases like chlamydia. Peers also contribute to the pressure to drive irresponsibly as a young male, increasing motor vehicle accidents.

Overall both individual and sociocultural factors, in isolation or in combination, can contribute to poor health outcomes for young people.

Question 27 (b)

Criteria	Marks
• Determines the value of a range of government strategies or actions that target the health of young people • Relates how these strategies or actions targeting major health issues have affected the health of young people • Uses relevant examples to support the response	11–12
• Provide a judgement of how government strategies or actions that target the health of young people, and relates how this affects major health issues affecting young people • Provides relevant examples OR • Makes the relationship evident between a range of strategies/actions and health issue(s) for young people • Provides relevant examples	8–10
• Provides characteristics and features of government strategies or actions that target the major health issue(s) of young people • Provides an example	5–7
• Sketches in general terms the actions or strategies that target the health of young people AND/OR • Sketches in general terms a major health issue that affects the health of young people	3–4
• Recognises and names an action or strategy that targets young people AND/OR • Provides an example of a major health issue that affects the health of young people	1–2

Sample answer:

There is a range of strategies developed to improve the health of young people. These include social action, legislation and public policy and health promotion initiatives to support and improve the health of young people. These can be applied to improve the effects of alcohol consumption and road safety as they both affect young people's health greatly causing a high percentage of harm, including injury and death.

Social action is any activity that is aimed at enhancing the wellbeing of others, with collaborative strategies that bring about change. The process of undertaking social action is as important as the final outcome. That is because the people involved also develop skills and enhance values in the process of undertaking social action. This is most beneficial for those involved. The final outcome may not be assured, however with sustained social action continued future social change should eventuate. A social action strategy for dealing with road safety is when a school's SRC has petitioned the local council increased parking bays near the school for their young drivers, a bike path for the local community and increased signage to slow cars down near the school. These all create a supportive environment, conducive to safer road and transport around the school. This is very important as part of social action, as well as empowering the young people's voice for a safer road environment around their school.

Health promotion initiatives are designed to promote good health in the community and reduce the harm of poor health behaviours. These are developed by government agencies. A health promotion initiative is more successful if it embodies the action areas of the Ottawa Charter, as well as targeting the groups specifically, eg young people. Health promotion targeting alcohol consumption and young people includes 'Don't turn your night out into a nightmare.' It successfully targeted poor health behaviours that young people were frequently demonstrating during excessive alcohol consumption. This has had success in increasing the awareness of this major health issue and preventing some risky behaviours. In the last 10 years the level of risky drinking by young people has decreased slightly. The 'Speeding – No One thinks Big of You' is a successful campaign targeting young male drivers and the risky behaviours they undertake – specifically speeding, the major cause of road accidents. It not only showed speeding as uncool, but was also designed to change the thought that peers think the behaviour is cool, as many do the behaviour in the first place for peer approval. This was a clever approach making speeding 'uncool', therefore the health promotion initiative has been more successful in targeting young people than any other speeding health promotion.

Question 28 (a)

Criteria	Marks
• Makes evident how AND/OR why sport is linked to cultural groups within Australian society • Provides relevant examples of connections between cultural identity and sport	8
• Provides characteristics and features of how sport is linked to the cultural groups within Australian society • Provides relevant examples	6–7
• Sketches in general terms how sport is linked to cultural groups within Australian society • Provides relevant examples	4–5
• Recognises and names different types of connections between cultural identity and sport	2–3
• Provides an example of a cultural/sport link that has occurred in Australian society	1

Sample answer:

'Organised' competitive sport in Australia was originally developed for Anglo, middle-class males and so is indicative of the sports played in England by males of that class (ie cricket and rugby).

The diversity of the Australian population has increased remarkably since white settlement, and many groups participate in particular sports traditionally associated with their culture, thus creating a link between cultural identity and sport. This link is observed with the Irish and Gaelic football. Many of the early Irish emigrants settled in the southern and western states of Australia. They developed a hybrid version of Gaelic football that we now know as 'Australian Rules'.

Since those early days, Australian Rules football slowly crept into the local Indigenous communities around these settlements. Australian Rules football now has a long association with Indigenous Australian participation and identity. The style of the game reflects not only Gaelic football but also has links to traditional Indigenous Australian activities. The Northern Territory with a particularly large Indigenous population has contributed many young Aboriginal players to national AFL teams. Those Indigenous Australian players whose talents are recognised by the AFL are supported and encouraged by their Indigenous Australian communities.

Emigration by Europeans after World War Two saw a huge influx in soccer as a major Australian code. Soccer in Australia has long grappled with the ethnic tensions around certain soccer clubs and even introduced rules in the late 1990s to have traditional ethnic names removed from clubs.

Question 28 (b)

Criteria	Marks
• Makes judgements about the influence of mass media on Australian sport/society • Provides relevant examples	11–12
• Identifies issues and provides points considering the influence of mass media on Australian sport/society • Provides relevant examples	8–10
• Provides characteristics and features of the influence of mass media on Australian sport • Provides relevant examples	5–7
• Sketches in general terms aspects of mass media that influence Australian sport	3–4
• Recognises and names media outlets that influence Australian sport	1–2

Sample answer:

The mass media is an influential method of communication available in Australian society. There are many benefits for companies that operate mass media outlets, as well as for Australian sporting organisations. It is a mutually-dependent relationship, whereby the moneymaking gains from the media promoting Australian sport and its athletes support the ongoing recognition of sport as a product.

Television, like other mass media, has the ability to dramatically influence how the public thinks about sport and what sport they watch. It can alter the viewer's perception of what is being seen. Camera angles can influence the viewer as can the commentary.

Television commentators will often encourage audience participation and make the coverage more interactive by providing reports and discussions of sport statistics. Commercially sponsored viewer competitions (like Classic Catch or Play of Day) are good public drawcards and increase the network and its sponsors' profitability.

There have been many advancements to promote viewer interest in sports coverage and the delivery of televised sport. Some of these include the development of multicoloured clothing and equipment to improve the entertainment and sponsorship appeal of sporting teams and athletes. The evolution of attire from tennis whites (still worn at Wimbledon) to highly coloured and technologically-advanced clothing worn in other tennis Grand Slams is an example of this. Sports like tennis and cricket have also seen the introduction of technological umpires, such as the 3rd Umpire and Hawk-Eye, as a result of mass media influence and technology. The National Rugby League has had to deal with changing game times to increase audience numbers in efforts for enhanced delivery of televised sport.

The print media continues to be a major influence on sport coverage. Newspapers for example devote whole sections of their daily papers to sport, using action photographs and articles that exemplify society's expectations of athleticism, strength and tough mental armour. Sporting magazines also encourage the public into hero worship of their sports and star players.

The use of colourful language in newspaper headlines can elicit positive or negative reactions to an article. In the case of male sports especially, language in newspapers is often 'warrior-like' depicting tough violent games with lots of aggression. Furthermore, journalists who report on violent behaviour, either on or off the field, drug use or other unsociable conduct by athletes can cause major divisions within the community in terms of perceptions of certain sports and their athletes.

Question 29 (a)

Criteria	Marks
• Provides reasons and relates the effect of specific physical activity options available for adult and aged athletes with medical conditions • Communicates ideas and information using relevant examples	8
• Provides characteristics and features of physical activity participation options for adult and aged athletes • Communicates ideas and information using relevant examples	6–7
• Indicates the main features of the physical activity participation options for adult and aged athletes	4–5
• Recognises and names feature(s) of the physical participation options for adult AND/OR aged athletes	2–3
• Provides some relevant information about physical activity AND/OR adult and aged athletes	1

Sample answer:

There are a wide range of physical activity options available to aged people that may suffer from medical issues including heart conditions, fractures, low bone density and flexibility and joint mobility problems.

Heart conditions such as heart attacks and high blood pressure may affect an aged person's fitness level or reduce their ability to work at high or alternating intensities. Physical activity is highly recommended for people in this sub-group. Once given medical clearance, activities that are most suitable include 'steady state' aerobic activities, for example, cycling, jogging, swimming and modified strength training programs. These forms of exercise are highly suitable as they provide a form of cardiovascular training without placing excess stress on the heart muscle and surrounding arteries. Furthermore, exercise is known to lower blood pressure in moderately hypertensive patients, which is a risk factor for more serious conditions like stroke. These exercise options are easily tailored to suit the needs of the aged people and the intensity easily increased once health standards improve. Therefore, it is evident that there are a range of suitable physical activity options for aged people with medical conditions.

Fractures and low bone density are common problems amongst aged people, particularly older women as a consequence of post-menopausal hormonal changes. However, there are a range of physical activity options available to them to improve these conditions and enhance overall health. Suitable activities include walking, cycling, aqua aerobics, yoga and low-weight resistance exercise. These options increase bone mass and density while reducing the pressure placed on ageing joints and bones. This will contribute to the overall improvement of diseases such as osteoporosis and improve strength, coordination and balance. It is clear that there are a number of exercise options available to older athletes with bone and density issues or those who have sustained a fracture.

Flexibility and joint mobility decline with age due to a loss in elasticity and effectiveness of tendons and ligaments around the joints. These medical conditions contribute to a range of injuries for aged people. Some examples of appropriate exercise options include swimming, yoga, Pilates, aqua-aerobics and Tai Chi. These exercise options are highly suitable as they promote gradual movements through a range of motions and can be tailored to suit the specific conditions of the person, for example someone experiencing arthritis of the knees may choose to use swimming as a low weight bearing exercise choice. Furthermore, these exercise options increase balance and stability which will reduce the likelihood of falls and further bone injury. It is evident that there are a specific range of exercise options available to aged people with flexibility and joint issues.

Question 29 (b)

Criteria	Marks
• Demonstrates a clear understanding of strategies used to support the body's temperature regulation mechanisms • Makes detailed judgements and determines the value of strategies to support the body's temperature regulation mechanisms • Provides relevant examples	11–12
• Demonstrates an understanding of the strategies used to support the body's temperature regulation mechanisms • Makes judgements and determines the value of strategies to support the body's temperature regulation mechanisms • Provides relevant examples	8–10
• Provides characteristics and features of strategies used to support the body's temperature regulation mechanisms • Provides examples	5–7
• Sketches in general terms the body's temperature regulation mechanism(s) or strategy(ies) used to support them	3–4
• Recognises and names strategy(ies) that may support the body's temperature regulation mechanism	1–2

Sample answer:

There are various strategies that an athlete can employ to support the convection, conduction, radiation and evaporation temperature regulation mechanisms of the body.

Clothing is an effective strategy to assist in maintaining the ideal body temperature. In hot, dry conditions, clothing will have a significant impact by reducing excessive exposure to UV rays and absorption of heat via radiation, which contributes to sunburn and exacerbates the dehydration process. Cotton, light coloured and loose fitting garments allow the body to breathe and continue to promote heat loss via convection. This is essential as sustained performance under hot conditions may lead to heat illness such as hyperthermia. For example cricket players wear white, loose clothing to avoid unnecessary heat absorption from the sun during the summer months of their season. Conversely, in cooler conditions or water, clothing can be effective in assisting in the prevention of hypothermia. For example wetsuits are worn by surfers and swimmers to negate the cooling effect via convection of water moving over the skin, which can occur at double the rate as on land.

Fluid intake is also an important consideration in temperature regulation, particularly in hot and humid conditions. 90% of blood plasma is water, therefore adequate water consumption to replace fluid lost through sweat is essential to prevent dehydration and maintain heat loss through the evaporation process. For events exceeding 1 hour like AFL, fluid intake is vital to ensure the body is still able to perspire, which is crucial for the maintenance of the evaporation cooling process. It is evident that fluid intake is crucial to ensuring the body is able to maintain optimal internal temperature while exercising.

Acclimatisation is a training technique in which an athlete experiences a range of climatic stressors, for example hot and humid climates. Regular exposure to such conditions in training will help initiate an adaptation in the athlete to become more comfortable in varied conditions. Acclimatisation is vital to ensuring the body can perform under any condition, for example Rugby League players from Sydney may find the humidity of playing in north Queensland affects their ability to lose heat via evaporation. Arriving in this region prior to competition or practising under simulated conditions will train the body's thermoregulatory

processes to adapt to humid conditions. Acclimatisation to humidity will also be well supported by adequate fluid intake, as the cooling effect of evaporation is not as effective in humid locations.

Lastly, removing the athletes from the strenuous conditions will ensure the body can manage its own core temperature. Excess exposure to hot conditions will increase the risk of hyperthermia via conduction and radiation. For example an Australian open tennis court in the middle of the day in summer can reach in excess of 50 degrees, which can significantly challenge an athlete's ability to perform. Removal from these conditions will limit the risk of dehydration, increased heart rate and heat illness. If athletes are not able to be removed from the conditions, these events must be supported through policies such as implementing more regular drinks breaks. In cold conditions, the body's core temperature may drop, increasing the risk of hypothermia. If possible, an athlete should postpone training or competing in such extreme cold conditions to avoid heat loss and impacts to performance. If not possible, an athlete should plan ahead to cope with extreme cold and wind by wearing insulated garments and ensuring sweat does not accumulate at a level which may create wind chill effect. It is obvious that in extreme weather conditions, an athlete may need to remove themselves from the environment to ensure the body is able to thermoregulate.

It is clear that there are a variety of strategies an athlete must consider in order to support the body's temperature regulation mechanisms.

Question 30 (a)

Criteria	Marks
• Makes evident the advantages and disadvantages related to drug testing of elite athletes • Makes evident the relationship between drug testing and the positive and negative outcomes • Provides relevant examples	8
• Identifies advantages and disadvantages related to drug testing of elite athletes • Makes a link(s) between drug testing and the positive and negative outcomes • May provide examples	6–7
• Identifies the advantages and disadvantages related to drug testing of elite athletes • Provides characteristics and features of major issues related to drug testing	4–5
• Sketches in general terms issues related to drug testing of elite athletes	2–3
• Names issues related to drug testing	1

Sample answer:

There are many pros and cons associated with drug testing. One of the problems with mandatory drug testing is that it directly violates an elite athlete's rights by deviating from the notion of freedom and privacy. Even an elite athlete may freely make the choice to take performance-enhancing drugs, with some understanding of the potential consequences. Mandatory drug testing denies the option of not having to undergo a drug test.

In sport mandatory drug testing is considered ethically acceptable with the view that it can serve as a deterrent against use of performance-enhancing drugs. The use of performance-enhancing drugs such as anabolic steroids is associated with cardiovascular disease, cancer and premature death. Mandatory drug testing serves as a course of protection against harm, meaning that drug testing in sport is actually in the best interest of elite athletes, should they choose to abide by the World Anti Doping Association guidelines.

Elite athletes who fail mandatory drug tests should be disqualified and banned for repeat offences. The benefit of tough rules is that they create a level playing field in sport.

A limitation of drug testing is the difference between what sports and sporting organisations define as 'banned substance'. So, an elite athlete caught using a particular substance in one sport may be able to use it in another. There are different rules for different elite athletes. This can also make it confusing for elite athletes who need to have a clear understanding of the rules and sanctions for their sport's governing body. For example the IOC guidelines are only relevant during the Olympic Games; outside this major event sporting bodies set their own rules.

Question 30 (b)

Criteria	Marks
• Makes a judgement of the value of each element used to design a training session • Makes evident the relationship between the elements of a training session and improving performance • Provides relevant examples to support response	11–12
• Makes evident the relationship between the elements of a training session and improving performance • Provides relevant examples to support response	8–10
• Provides characteristics and features of the elements used to design a training session • Provides relevant examples	5–7
• Sketches in general terms the elements used to design a training session	3–4
• Recognises and names elements used to design a training session	1–2

Sample answer:

Every coach will develop their own approach to planning a session. However, there are specific elements that are contained in any session for athletes. The first element is health and safety. This involves the coach checking with the athlete if there are any medical problems or concerns. In addition the playing space and equipment needs to be checked for suitability and safety. By commencing the session in this manner, medical issues can be prevented or reduced, and therefore is important in looking after the wellbeing of the athlete.

The next element is providing an overview of the session. The overview should be brief and allow the athlete to prepare mentally for the session. This is important as it also allows the athlete to set session goals around the training sets or the overall session.

Warm-up and cool down are essential parts of the session which assist the athlete to prepare mentally and physically for the session. The warm-up consists of a general gross motor activity designed to work the specific muscular groups to be used during the session. The benefit is that the body experiences increased blood flow and increased movement around the joints. To complement the warm-up is dynamic stretching which enhances flexibility slightly but also enhances the response of the muscles eg increased muscle explosiveness.

Skills instruction and practice are also elements of a training session. Skills instruction needs to be brief so as not to reduce the benefits attained by the warm-up. This provides the opportunity for the coach to instruct on what to do during skill development and practice. Skill practice is essential if athletes are to improve their biomechanical efficiency or correct poor technique.

Conditioning is a vital component of the training session. Physiological adaptations required for competition are attained through the conditioning phase of the training session.

The evaluation element of the training session is important for providing and receiving feedback. For example at the end of the session the coach will ask the athlete for perceived rate of exertion to assess the intensity of the training session.

Question 31 (a)

Criteria	Marks
• Relates the role of the media and its influence to social attitudes and public policies • Provides relevant examples linked to one group experiencing inequalities	8
• Recognises how the media influences social attitudes and public policies • Provides relevant examples linked to one group experiencing inequalities	6–7
• Provides characteristics and features of the media and/or its influence on social attitudes and public policies • May provide a relevant example	4–5
• Sketches in general terms social attitudes and public policies	2–3
• Provides facts or information regarding media, social attitudes and public policies OR • Provides an example of public health policy	1

Sample answer:

The role of the media is to increase awareness of the inequities and the size of the problem. The rate of homeless persons within Australia is increasing which is an issue as they have higher rates of morbidity particularly substance abuse, mental health issues, and communicable diseases due to poor living conditions. The media needs to work towards breaking down the stereotypes of people and populations experiencing inequity including the homeless. The media can have a positive impact and present ways in which individuals, businesses and governments can be supportive. While many homeless people seek refuge in shelters, many more are turned away due to excess demand. The media can lobby governments for increased funding for services and accommodation for the homeless and finding out ways to reduce domestic violence and resolve family issues so more people have a safe accommodation. This is evident in the Big Issue magazine. The magazine documents stories that relate to people living in a disadvantaged way whether it be not having safe, secure or adequate housing resulting from financial hardship or abusive or difficult living situations. This allows homeless people to become vendors for the magazine buying it for $3 and selling it for $6 where they keep the profits. This assists with the socioeconomic burden for homeless people and allows them to purchase nutritious foods while improving their overall health reducing the stigmas of the group and improving their mental health as they generally feel powerless and reliant on others for food, shelter and clothing. Its main benefit is it helps to provide society with a sympathetic perspective on the issues faced by the homeless. Any negative issues on drugs or crime need to be addressed in a compassionate manner.

Question 31 (b)

Criteria	Marks
• Makes clear judgement(s) on how different factors create health inequities • Makes evident the relationship between the inequities and the factors in relation to a population group • Provides relevant examples linked to a population group	11–12
• Provides clear reasons showing how different factors create health inequalities • Provides characteristics and features of the inequities and the factors in relation to a population group • Provides relevant examples	9–10
• Provides characteristics of different factors in relation to a population group • May provide an example(s)	6–8
• Sketches in general terms the inequities of a population group	3–5
• Provides some relevant information on health inequities of population group(s)	1–2

Sample answer:

There are many factors that are out of an individual's control that hinder the chance of good health for some population groups. Socioeconomic status and rural and remoteness are considered to cause inequities.

Socioeconomic status can contribute to their standard of living. People with high SES have increased choices and opportunities, for example housing and areas in which they live and increased choice in nutritional foods. Those with low SES tend to be unhealthier and can be linked to a poorer attitude towards maintaining health. This is evident in epidemiological data collected showing that they are more likely to access primary and secondary health facilities including doctors and hospitals rather than a preventative health service like immunisation programs or dental check-ups. Their lifestyles are often riskier, with poor diets, lack of exercise and higher rates of smoking and drinking. All of these factors lead to an increase in the morbidity and mortality of low SES from chronic lifestyle diseases including CVD, cancer and diabetes. Due to their lower levels of income people of low socioeconomic status are less likely to or be able to purchase medicines to treat minor illnesses and their nutritionally poor diets lower their immunity to many infections. Low SES people are less likely to access and be able to afford private health insurance which increases their waiting times for elective preventative health procedures including breast screening or colonoscopy for bowel cancer. This has a major impact on their health as prevention of diseases is more successful than the treatment down the track. Ultimately a disparity in SES and health status will lower overall health in a society as many diseases are not confined by households in which the diseases occur.

Due to the lower levels of education and lower income occupations associated with low SES, both education and occupation can be a significant risk factor for an individual's health. Occupations carry an element of risk that can affect a person's health. High stress, exposure to radiation, or heavy strain can lead to a debilitating injury or physical condition that can reduce a person's quality of life. Some blue-collar occupations can expose workers to toxins or carcinogens increasing their risk of developing cancers or respiratory dysfunction through inhaling vapours which have a significant negative impact on their health. Generally a person's education has a large determining influence on the level of income earned. There is also greater potential for people who stay in school to have an increased level of health literacy. This is the ability to understand and interpret health information and use it to promote and maintain good health. Young people who leave school early and remain

unemployed are at greater risk of developing poor mental health and more likely to remain in low SES throughout their life.

Therefore, governments should actually invest heavily in the education of people if they want to reduce health inequities rather than spend money in treating disease in the health sector. When it comes to low-SES and health, prevention with education is better then hospital care.

2016 HSC
Personal Development, Health and Physical Education
Mapping Grid

Section I
Part A

Question	Marks	Content	Syllabus outcomes
1	1	Identify priority health issues	H2
2	1	Energy systems	H7
3	1	Groups experiencing health inequities	H2, H3
4	1	Types of training and training methods	H7
5	1	Health care in Australia	H14
6	1	Recovery strategies	H8
7	1	High levels of preventable chronic disease	H1
8	1	Physiological adaptations in response to training	H7, H8
9	1	Health care in Australia	H5
10	1	Assessment of skill and performance	H10
11	1	Health promotion based on the five action areas of the Ottawa Charter	H4
12	1	Types of training and training methods	H8
13	1	High levels of preventable chronic disease	H2
14	1	Nutritional considerations	H11
15	1	Identify priority health issues	H15
16	1	Supplementation	H11
17	1	Growing and ageing population	H15
18	1	Learning environment	H9, H10
19	1	Health promotion based on the five action areas of the Ottawa Charter	H14
20	1	Physiological adaptations in response to training	H7

Section I
Part B

Question	Marks	Content	Syllabus outcomes
21	5	Complementary and alternative health care	H14, H15
22	7	Groups experiencing health inequities	H2, H3
23	8	Health promotion based on the five action areas of the Ottawa Charter	H4
24 (a)	3	Stages of skill acquisition	H10
24 (b)	4	Feedback	H9
25	5	Assessment of skill and performance	H17
26	8	Psychological strategies to enhance motivation and manage anxiety	H11, H17

Section II

Question	Marks	Content	Syllabus outcomes
27 (a)	8	Determinants of health in young people	H6, H15
27 (b)	12	Actions targeting health issues relevant to young people	H2, H6, H14
28 (a)	8	Physical activity, sport and cultural identity	H12
28 (b)	12	The relationship between sport and mass media	H12, H16
29 (a)	8	Adult and aged athletes	H13, H17
29 (b)	12	Environmental considerations	H8, H13
30 (a)	8	Use of drugs	H8, H17
30 (b)	12	Elements to be considered when designing a training session	H10, H16
31 (a)	8	Media influencing social attitudes and public policy	H3, H5
31 (b)	12	Factors that create health inequities	H3, H15