



**CATHOLIC SECONDARY SCHOOLS ASSOCIATION OF NSW
2014 TRIAL HIGHER SCHOOL CERTIFICATE EXAMINATION
PERSONAL DEVELOPMENT, HEALTH AND PHYSICAL EDUCATION
MARKING GUIDELINES**

**Section I
Part A
20 marks**

Questions 1-20 (1 mark each)

Question	Answer	Outcomes Assessed	Targeted Performance Band
1	C	H2, H3	2-4
2	B	H1, H2	2-4
3	A	H2, H16	2-4
4	D	H14, H15	3-4
5	A	H1	3-4
6	C	H5, H15	3-5
7	B	H5, H14	3-5
8	B	H15	3-5
9	A	H5, H16	4-6
10	D	H4	4-6
11	C	H7	2-4
12	A	H8	2-4
13	D	H11	2-4
14	B	H8, H11	3-4
15	C	H9	3-5
16	B	H8, H17	3-5
17	C	H11	3-5
18	C	H10	3-5
19	D	H16	4-6
20	D	H10, H16	4-6

DISCLAIMER

The information contained in this document is intended for the professional assistance of teaching staff. It does not constitute advice to students. Further it is not the intention of CSSA to provide specific marking outcomes for all possible Trial HSC answers. Rather the purpose is to provide teachers with information so that they can better explore, understand and apply HSC marking requirements, as established by the NSW Board of Studies.

No guarantee or warranty is made or implied with respect to the application or use of CSSA Marking Guidelines in relation to any specific trial exam question or answer. The CSSA assumes no liability or responsibility for the accuracy, completeness or usefulness of any Marking Guidelines provided for the Trial HSC papers.

Section I
Part B (40 marks)

Question 21 (3 marks)

Outcomes Assessed: H1, H2

Targeted Performance Bands: 2 - 3

Criteria	Mark
<ul style="list-style-type: none">• Sketches in general terms what health behaviours and practices lead to healthy ageing• Illustrates answer with relevant examples• Presents ideas in a clear and logical way	3
<ul style="list-style-type: none">• Sketches in general terms what is healthy ageing• Illustrates answer with limited examples	2
<ul style="list-style-type: none">• Provides some relevant information about healthy ageing	1

Syllabus Content:

- A growing and ageing population
 - Healthy ageing

Suggested answers may include:

Healthy ageing describes a group of people over 50. Identifiable health behaviours and practices that lead to healthy ageing of this group include;

Ability to take care of themselves – Through maintaining a lifestyle that includes healthy eating, exercise and preventative measures for lifestyle diseases they will not only increase their life expectancy but the number of years with a quality life.

Healthy Eating and Physical Activity – These will reduce the risk of chronic diseases such as CVD, Cancer and Diabetes.

Not Smoking – As a result of not smoking people will reduce the risk of CVD and Lung Cancer.

Volunteering in the Community – Through the interaction with community members the healthy ageing will feel worthwhile and will consequently have a positive impact on their social and mental health.

Being financially independent - The government has encouraged people to contribute more to their superannuation during their working life so they are not solely reliant on their government pension once they retire. Consequently, they can afford to look after their health and wellbeing which will have a positive affect on both their physical and mental health.

Accessing relevant health services – By accessing services such as breast screening, cholesterol and blood pressure checks and skin cancer check ups the Healthy Ageing are looking for preventative measures to ensure they continue to be physically healthy.

DISCLAIMER

The information contained in this document is intended for the professional assistance of teaching staff. It does not constitute advice to students. Further it is not the intention of CSSA to provide specific marking outcomes for all possible Trial HSC answers. Rather the purpose is to provide teachers with information so that they can better explore, understand and apply HSC marking requirements, as established by the NSW Board of Studies.

No guarantee or warranty is made or implied with respect to the application or use of CSSA Marking Guidelines in relation to any specific trial exam question or answer. The CSSA assumes no liability or responsibility for the accuracy, completeness or usefulness of any Marking Guidelines provided for the Trial HSC papers.

Question 22 (4 marks)

Outcomes Assessed: H3

Targeted Performance Bands: 3-4

Criteria	Mark
<ul style="list-style-type: none">Recognises how priority issues are identified in part by cost to the individual and communityIllustrates using relevant examplesPresents ideas in a clear and logical way	4
<ul style="list-style-type: none">Recognizes some ways the cost influences identification of priority issuesIllustrates using relevant examplesPresents ideas in a clear and logical way	2-3
<ul style="list-style-type: none">Recognizes some information about identification of priority issues and cost	1

Syllabus Content:

- Identifying priority health issues
 - Social justice principles
 - Costs to the individual and community

Suggested answers may include:

It is vital, with limited health resources, that health priorities are clearly established so that the most urgent needs are met. It is also important for coping with future trends and issues so that the allocation of resources can be most effectively used.

One such tool for identifying priority issues is by considering the cost of an illness or condition to both the individual and the community.

Individual's financial costs are often associated with treatment such as doctor's fees and prescription costs. They may also incur other financial costs such as lost productivity or time off work. The loss of productivity is also a cost borne by the community.

Medicare and the Pharmaceutical Benefit Scheme are intended to provide access to basic health care and services to all Australians regardless of their background or situation and ability to pay. This does however increase the burden on health care spending with big increases in the cost of health care and medications. Australia's growing and aging population has added to the increasing costs. This makes this group a priority population group. Additionally, some chronic diseases require large resources due to their ongoing nature.

Non-financial costs suffered by individuals might be associated with deteriorating quality of life due to pain or exclusion from normal aspects of their life such as sport. This can lead to mental health issues due to emotional and social impacts and can make things worse.

DISCLAIMER

The information contained in this document is intended for the professional assistance of teaching staff. It does not constitute advice to students. Further it is not the intention of CSSA to provide specific marking outcomes for all possible Trial HSC answers. Rather the purpose is to provide teachers with information so that they can better explore, understand and apply HSC marking requirements, as established by the NSW Board of Studies.

No guarantee or warranty is made or implied with respect to the application or use of CSSA Marking Guidelines in relation to any specific trial exam question or answer. The CSSA assumes no liability or responsibility for the accuracy, completeness or usefulness of any Marking Guidelines provided for the Trial HSC papers.

Question 23 (5 marks)

Outcomes assessed: H15

Targeted Performance bands: 3-5

Criteria	Mark
<ul style="list-style-type: none">• Describes the impact of a range of emerging new treatments and technologies on health care in Australia• Illustrates answer with relevant examples• Presents ideas in a clear and logical way	4 - 5
<ul style="list-style-type: none">• Identifies some emerging new treatments and technologies that have impacted upon health care in Australia	2 - 3
<ul style="list-style-type: none">• Provides some relevant information about medical treatment in Australia	1

Syllabus Content:

- Health care in Australia
 - Impact of emerging new treatments and technologies on health care, e.g. Cost and access, benefits of early detection

Suggested answers may include:

New treatments and technologies can improve health outcomes for individuals and reduce the burden on the health care system. This will result in less people requiring complicated health care. The benefits of emerging new treatments and technologies include early detection, early treatment, less side effects impacting on individuals lives due to improved treatment and improved functionality of service. E.g., treat more patients and less follow up is needed. Other features of these emerging new treatments include less invasive procedures (keyhole surgery vs large incision), a greater focus on prevention of disease (screenings), less cost to the individual, greater chance of recovery, greater ageing population and associated costs (e.g. Medicare and PBS burden), more expensive medical costs to the community, greater cost of medical research.

Some examples of new treatments and technologies that have improved the burden on Australia's health care system include cervical cancer screening, STI testing, mammogram technology for breast cancer detection, ultrasound and MRI scanning technology and recently, genetic testing for a variety of cancers.

DISCLAIMER

The information contained in this document is intended for the professional assistance of teaching staff. It does not constitute advice to students. Further it is not the intention of CSSA to provide specific marking outcomes for all possible Trial HSC answers. Rather the purpose is to provide teachers with information so that they can better explore, understand and apply HSC marking requirements, as established by the NSW Board of Studies.

No guarantee or warranty is made or implied with respect to the application or use of CSSA Marking Guidelines in relation to any specific trial exam question or answer. The CSSA assumes no liability or responsibility for the accuracy, completeness or usefulness of any Marking Guidelines provided for the Trial HSC papers.

Question 24 (8 marks)

Outcomes Assessed: H4, H14

Targeted Performance Bands: 2-6

Criteria	Mark
<ul style="list-style-type: none">• Identifies the action areas of the Ottawa Charter• Makes evident the relationship between the action areas of the Ottawa Charter and a health promotion initiative related to Australia's health priorities• Applies the skills of critical thinking and analysis• Communicates ideas and information using relevant examples• Presents a logical and cohesive response	8
<ul style="list-style-type: none">• Identifies the action areas of the Ottawa Charter• Provides characteristics and features of the action areas of the Ottawa Charter and a health promotion initiative related to Australia's health priorities• Communicates ideas and information using some relevant examples	5-7
<ul style="list-style-type: none">• Sketches in general terms the action areas of the Ottawa Charter or a health promotion initiative related to Australia's health priorities	3-4
<ul style="list-style-type: none">• Provides some relevant information about the Ottawa Charter or a health promotion initiative	1-2

Syllabus Content:

- The Ottawa charter in action
- Critically analyse the importance of the five action areas of the Ottawa Charter through a study of TWO health promotion initiatives related to Australia's health priorities

Suggested answers may include:

The following sample answer uses Fresh Tastes @ School as an example of a health promotion initiative. Students may also use other relevant campaigns studied in class. E.g. National Tobacco Strategy, Close the Gap.

The Ottawa Charter action areas include Building Healthy Public Policy, Creating Supportive Environments, Strengthening Community Action, Developing Personal Skills and Reorienting Health Services. The Fresh Tastes @ School is an example of a health promotion initiative. A healthy school canteen supports the nutritional messages addressed through the PDHPE curriculum by encouraging the development of healthy eating habits and providing a supportive environment in which healthy food choices can be made to assist in eliminating poor diet as a risk factor of CVD (an Australian health priority).

The first action of the Ottawa Charter is Building Healthy Public Policy. This area involves legislation, fiscal measures, taxation and social policies to increase health equity and create a

DISCLAIMER

The information contained in this document is intended for the professional assistance of teaching staff. It does not constitute advice to students. Further it is not the intention of CSSA to provide specific marking outcomes for all possible Trial HSC answers. Rather the purpose is to provide teachers with information so that they can better explore, understand and apply HSC marking requirements, as established by the NSW Board of Studies.

No guarantee or warranty is made or implied with respect to the application or use of CSSA Marking Guidelines in relation to any specific trial exam question or answer. The CSSA assumes no liability or responsibility for the accuracy, completeness or usefulness of any Marking Guidelines provided for the Trial HSC papers.

healthier community. The allocation of funds to develop and implement the strategy began from the Obesity Summit, and government departments such as NSW Health and DEC had major roles in devising and advancing the initiative. The decision by DEC to adopt the initiative as a matter of policy for all government schools clearly demonstrates this healthy public policy in action.

The second action area of the Ottawa Charter is to Create Supportive Environments. This action area involves creating an environment that supports healthy choices and healthy living. Through The Fresh Tastes @ School initiative, establishing canteens that only offered food options in the healthy part of the food spectrum, created an environment which strongly supported healthy behaviours. The healthy canteen supports those people who wish to make healthy choices, and it also encourages others to take healthy options by limiting the potential for them to make unhealthy choices.

The third action area is Strengthening Community Action. This action area involves empowering communities to take action and giving them ownership and control of their health. For example through the development and establishment of a collaborative canteen committee which included representatives of key stakeholders within the school such as students, school executive, parents and school canteen. As a result, this enabled all stakeholders to take ownership and control of their health.

The fourth action area of the Ottawa Charter is Developing Personal skills. This action area involves giving people the power to control their health by providing them with the necessary information and skills. The Fresh Tastes @ School initiative helps school students take the knowledge and skills that they have learnt in the PDHPE classroom and practically apply them to their own eating habits. For example, choosing a piece of fruit over a packet of chips as a snack. They become more familiar with identifying healthy and unhealthy foods and are more able to make informed decisions about food choices.

The final action area is Reorient Health Services. This action area involves sharing the responsibility for health among individuals, community groups, health professionals and governments. It focuses the work of these sectors into prevention rather than cure. In regards to reorienting health services the Fresh Tastes @ School initiative was developed and established by NSW Health in response to childhood obesity. NSW Health expanded its charter in to the education spectrum and began to take on an important role in leading preventative approaches to ill health. The funding allocation emphasises its commitment to reorienting the NSW Health Department to play a greater role in prevention, as well as its role in providing curative services.

Fresh Tastes @ School can therefore be seen as a health promotion initiative that has effectively utilised the five action areas of the Ottawa Charter.

DISCLAIMER

The information contained in this document is intended for the professional assistance of teaching staff. It does not constitute advice to students. Further it is not the intention of CSSA to provide specific marking outcomes for all possible Trial HSC answers. Rather the purpose is to provide teachers with information so that they can better explore, understand and apply HSC marking requirements, as established by the NSW Board of Studies.

No guarantee or warranty is made or implied with respect to the application or use of CSSA Marking Guidelines in relation to any specific trial exam question or answer. The CSSA assumes no liability or responsibility for the accuracy, completeness or usefulness of any Marking Guidelines provided for the Trial HSC papers.

Question 25 (3 marks)**Outcomes Assessed: H7****Targeted Performance Bands: 2-3**

Criteria	Mark
<ul style="list-style-type: none"> • Outlines THREE physiological adaptations that occur as a response to training • Illustrates answer with relevant examples • Presents ideas in a clear and logical way 	3
<ul style="list-style-type: none"> • Sketches in general terms physiological adaptations that occur in response to training 	2
<ul style="list-style-type: none"> • Provides some relevant information on physiological adaptations 	1

Syllabus Content:

- Physiological adaptations in response to training
 - Resting heart rate
 - Stroke volume and cardiac output
 - Oxygen uptake and lung capacity
 - Haemoglobin level
 - Muscle hypertrophy
 - Effect on fast/slow twitch muscle fibres

Suggested answers may include:

	Adaptation	Affect
Resting Heart Rate	Decrease in resting and submaximal heart rate	Heart is more efficient and needs to work less to transport blood around the body
Stroke Volume	Increased at rest, during exercise and at maximal exercise	This allows more blood to be pumped around the body per beat
Cardiac Output	Increased cardiac output	As a result of increased stroke volume an athlete can pump between 20 – 40 litres of blood around the body per minute
Oxygen Uptake	Increased capillaries, myoglobin and mitochondria	Increased ability for body to take in oxygen and therefore deliver more oxygen to the working muscles
Lung Capacity	Increased maximal ventilation	The body has an increased ability to transport oxygen around the body and remove carbon dioxide, due to increased oxygen uptake
Haemoglobin Level	The amount of haemoglobin the body in increased	Increased ability to carry oxygen to the muscles
Muscle hypertrophy	Increased size with resistance training	Muscles develop an increase in strength and power
Muscle fibres	Percentage of slow twitch fibres remains the same. Increased enzymes, ATP, PC and glycogen stores.	Increased power output before fatigue Increased availability of ATP at the start of exercise Greater strength and power

DISCLAIMER

The information contained in this document is intended for the professional assistance of teaching staff. It does not constitute advice to students. Further it is not the intention of CSSA to provide specific marking outcomes for all possible Trial HSC answers. Rather the purpose is to provide teachers with information so that they can better explore, understand and apply HSC marking requirements, as established by the NSW Board of Studies.

No guarantee or warranty is made or implied with respect to the application or use of CSSA Marking Guidelines in relation to any specific trial exam question or answer. The CSSA assumes no liability or responsibility for the accuracy, completeness or usefulness of any Marking Guidelines provided for the Trial HSC papers.

Question 26 (4 marks)

Outcomes assessed: H8

Targeted Performance bands: 3-4

Criteria	Mark
<ul style="list-style-type: none">• Provides arguments for the use of neural strategies to improve performance in a chosen sport• Illustrates answer with relevant examples• Presents ideas in a clear and logical way	4
<ul style="list-style-type: none">• Outlines how a neural strategy may improve performance OR• Outlines the characteristics of a neural strategy	2-3
<ul style="list-style-type: none">• Provides some relevant information regarding neural strategies	1

Syllabus Content:

- Recovery strategies
 - Neural strategies, e.g. Hydrotherapy, massage

Suggested answer may include:

Neural strategies will benefit the athlete involved in intense physical activity, like Rugby League, as the sport can be taxing on the muscular system as well as the central and peripheral nervous systems. Neural strategies are designed to relax the body and muscles, reducing the perception of localised muscle fatigue as well as decreasing mental fatigue. Their popularity has increased in recent years particularly in team sports. Neural strategies the athlete could adopt are hydrotherapy and massage.

Hydrotherapy involves the use of water to relax, soothe pain and assist metabolic recovery whilst providing support for movements which eliminate jarring and straining movements. Therefore, after a game of rugby league, the team may be involved in some of these typical hydrotherapy methods like spas, underwater massage and walking in a swimming pool (heated or non-heated). Active exercise can be incorporated into hydrotherapy sessions as all movements will be gravity assisted. Studies have shown that lactate levels are recovered equally fast by either contrast water immersion or active recovery. Lactate recovery following passive rest was significantly slower. Active recovery for 10-15 minutes following exercise requires extra energy and may be less effective if energy stores have already been depleted.

Massage can improve the performance of a rugby league player by reducing the lactic acid, returning the neural pathways to full working order quickly, increases blood flow and delivers oxygen and nutrients to muscles to reduce recovery times, maintains posture and reduces chance of postural deformities due to tight muscles and it can also benefit the athlete by realigning muscle fibres, breaking down the scar tissue and decreasing the feelings of fatigue. Post event massage may relieve swelling, reduce muscle tension, assist in eliminating toxic by-products and promote flexibility. Therefore, neural strategies would benefit the rugby league player as it reduces their recovery time and they will be able to return to training/game time faster than without the use of hydrotherapy and massage.

DISCLAIMER

The information contained in this document is intended for the professional assistance of teaching staff. It does not constitute advice to students. Further it is not the intention of CSSA to provide specific marking outcomes for all possible Trial HSC answers. Rather the purpose is to provide teachers with information so that they can better explore, understand and apply HSC marking requirements, as established by the NSW Board of Studies.

No guarantee or warranty is made or implied with respect to the application or use of CSSA Marking Guidelines in relation to any specific trial exam question or answer. The CSSA assumes no liability or responsibility for the accuracy, completeness or usefulness of any Marking Guidelines provided for the Trial HSC papers.

Question 27 (5 marks)

Outcomes assessed: H9, H16

Targeted Performance bands: 3-5

Criteria	Mark
<ul style="list-style-type: none">• Extensive evaluation of both objective and subjective measures in assessing the performance of athletes during a team selection• Provides a range of examples to show objective and subjective measures relating to relevant sports• Presents ideas in a clear and logical way	5
<ul style="list-style-type: none">• Thorough evaluation of both objective and subjective measures in assessing the performance of athletes during a team selection• OR successfully explains both objective and subjective measures• Provides examples showing objective and subjective measures relating to relevant sports	3-4
<ul style="list-style-type: none">• Describes the use of both objective and subjective measures in assessing the performance of athletes during a team selection• Provides basic examples to show objective and subjective measures relating to relevant sports	1-2

Syllabus Content:

- Assessment of skill and performance
 - Objective and subjective performance measures
 - Validity and reliability of tests
 - Personal versus prescribed judging criteria

Students will be able to provide examples showing how both objective and subjective measures can be used to assess performance AND how the measures are appropriate (or not) for a particular sport.

Suggested answers may include:

Objective measures are those that can be recorded independently of the individual observer. It can be measured by time (stop watch), distance (tape measure), a result or a number eg goals scored, tackles made, intercepts. Objective measures decrease bias and results can be replicated and compared.

In sports such as athletics and swimming, objective measures are effective in measuring performance. By measuring performance using time or distance athletes' performance can be compared. For example, the two fastest times for the 100m sprint will make the team. Therefore selection can be based on these results. This method would be less effective in assessing performance of a gymnast as speed or distance is not a crucial element of their performance. The points accumulated at the end of a gymnastics competition would be an objective measure but the points have been allocated based on a more subjective measure of performance.

DISCLAIMER

The information contained in this document is intended for the professional assistance of teaching staff. It does not constitute advice to students. Further it is not the intention of CSSA to provide specific marking outcomes for all possible Trial HSC answers. Rather the purpose is to provide teachers with information so that they can better explore, understand and apply HSC marking requirements, as established by the NSW Board of Studies.

No guarantee or warranty is made or implied with respect to the application or use of CSSA Marking Guidelines in relation to any specific trial exam question or answer. The CSSA assumes no liability or responsibility for the accuracy, completeness or usefulness of any Marking Guidelines provided for the Trial HSC papers.

Subjective measures in performance are based on personal opinions and individual judgments. It does not allow for easy comparison of set criteria. It can be less accurate or reliable and more biased.

In sports such as diving, gymnastics, synchronised swimming, ice dancing and aerobics subjective measures are more likely with judges using their opinion to assess performance based on some criteria. Bias may occur when no criteria is present and a coach may assess a players performance based on their view of the game or performance. For example, a coach saying an athlete played well because they seemed to be all over the field during the trial game.

In selecting a team the more objective the measures the easier it may be to select a team using reliable results to compare athletes, however a number of team sports will rely on subjective views of a selector.

Question 28 (8 marks)

Outcomes Assessed: H10, H11, H17

Targeted Performance Bands: 2-6

Criteria	Mark
<ul style="list-style-type: none"> • Adds a degree of accuracy, depth to, draws out and relates the implications of nutritional considerations and their impact on performance in an endurance event • Illustrates answer with relevant examples • Presents ideas in a clear and logical way 	8
<ul style="list-style-type: none"> • Makes the relationship evident between nutritional considerations and performance in an endurance event • Illustrates answers with relevant example 	5-7
<ul style="list-style-type: none"> • Sketches in general terms the nutritional considerations for endurance events 	2-4
<ul style="list-style-type: none"> • Identifies some relevant information in relation to nutritional considerations for performance 	1

Syllabus Content:

- Nutritional considerations
 - Pre-performance, including carbohydrate loading
 - During performance
 - Post-performance

Students should clearly be able to compare the dietary requirements of athletes in different sports considering pre-, during and post-performance needs.

DISCLAIMER

The information contained in this document is intended for the professional assistance of teaching staff. It does not constitute advice to students. Further it is not the intention of CSSA to provide specific marking outcomes for all possible Trial HSC answers. Rather the purpose is to provide teachers with information so that they can better explore, understand and apply HSC marking requirements, as established by the NSW Board of Studies.

No guarantee or warranty is made or implied with respect to the application or use of CSSA Marking Guidelines in relation to any specific trial exam question or answer. The CSSA assumes no liability or responsibility for the accuracy, completeness or usefulness of any Marking Guidelines provided for the Trial HSC papers.

Suggested answers may include:

Athletes competing in endurance events need to pay specific attention to the nutritional considerations required for them to compete at their capacity. Their nutritional considerations can be broken down into 3 specific phases, pre-performance, during performance and post-performance. While complete nutritional balance is essential for optimal physical performance, the specific roles of carbohydrates and hydration are the two most important considerations pre-performance. Because different foods have differing amounts of energy, the type of food consumed prior to competition directly affects the quantity of energy available. Food consumed prior to an event is useful only if it's digested and energy and nutrients are made available to where they are required. There are a number of important considerations for athletes to be aware of as part of a pre-performance nutrition. These include:

- **Type of food** - Athletes are advised to eat mostly complex carbohydrates (pasta, cereal, bread, fruits) and to avoid foods that are unfamiliar. Foods high in fat, protein and fibre require longer periods to digest. If solid foods are difficult, liquid meals are recommended.
- **Amount of food** – Generally the amount of food relates to the type of competition. Athletes competing in endurance events require more kilojoules to fire their metabolism. Large amounts of kilojoules however are prone to causing discomfort so an endurance athlete should place high importance on following the correct carbohydrate loading procedures.
- **When to eat** – The last full meal for an endurance athlete should be consumed 3-4 hours before the event. Limited solids can still be consumed up to two hours prior to competition but as you get closer the emphasis should be on consuming snacks and liquid preparations.
- **Hydration** – Athletes are encouraged to drink adequate amounts of fluid in the preceding days. On the day of competition, athletes, as a general rule, would consume 500-600mls 2 hours before the event and 250-300ml in the last ¼ of an hour.
- **Carbohydrate loading** - Carbohydrate loading is the technique of loading the muscles with glycogen in preparation for a high intensity endurance activity of more than 90 minutes. However, the athlete should achieve glycogen saturation by tapering their training intensity and increasing the carbs in their diet.

During events, nutritional considerations relate to maintaining hydration levels and enriching glucose levels if performances are extended. The need for carbohydrate and electrolyte replacement depends on a number of factors including intensity, duration, humidity, clothing type and individual sweat rates. Nutritional considerations for during performances need to address the following:

- Conserve muscle glycogen and maintain blood glucose – Carbohydrate supplementation needed to avoid glycogen depletion (75% liquid carbs)
- Adequate hydration by regular fluid intake must be maintained – 200-300ml every 15-20 minutes, preferred sports drink and don't wait until thirst develops

A post performance nutritional plan for an endurance event aims to return the body to its pre-event state asap. The post event focus should be on high fluid intake with a ratio of 4:1 carbohydrate to protein. The first two hours following exercise are the most important. The best way to recover is to act quickly and eat food with high carbohydrate content. Fluid intake guidelines post-performance relate directly to the amount of weight lost during the performance. As a guideline, 1.5 litres of fluid should be consumed for every kilogram lost.

DISCLAIMER

The information contained in this document is intended for the professional assistance of teaching staff. It does not constitute advice to students. Further it is not the intention of CSSA to provide specific marking outcomes for all possible Trial HSC answers. Rather the purpose is to provide teachers with information so that they can better explore, understand and apply HSC marking requirements, as established by the NSW Board of Studies.

No guarantee or warranty is made or implied with respect to the application or use of CSSA Marking Guidelines in relation to any specific trial exam question or answer. The CSSA assumes no liability or responsibility for the accuracy, completeness or usefulness of any Marking Guidelines provided for the Trial HSC papers.

The media provides the general public with instant commentary and results of sporting events. Television, in particular has a large impact on the way sport is presented and therefore perceived. It has the ability to manipulate vision. Social values and meanings around sport (perception of what is important) are conveyed by choice of sport shown and amount of coverage given. For e.g. more coverage is given to Anglo Saxon male dominated sports such as league. In relation to print media, imagery and language used and space devoted to a news story affects perception of the sport.

Sport is a highly attractive entertainment package for the media particularly television as it guarantees ratings and viewers. For sport itself, media has vast potential for publicity, advertising and attraction of sponsorship. As a result, sport has had to maintain the entertainment factor with some sports having to change the nature of their competition or uniforms worn. For some sports this has had a major impact on tradition. For example, tennis has introduced the challenge rule, use of hawk eye and tiebreakers. Cricket has introduced new formats such as one day cricket or 20/20 with colourful uniforms/balls. Segments of sporting play have also become compartmentalised to meet the needs of television commercial breaks. This can be seen in AFL coverage where a flashing light system alerts the umpire that a commercial is finished and play can recommence.

It can therefore be seen that the media has a large impact upon sport and that the relationship is interdependent and beneficial to both parties.

Question 31

(a) (8 marks)

Outcomes Assessed: H13

Targeted Performance Bands: 2-4

Criteria	Mark
<ul style="list-style-type: none"> Clearly explains the assessment procedures you would use to determine the nature and extent of the injury Provides examples that indicate the relationship between the assessment procedures and the injury that was sustained. Presents ideas in a clear and logical way 	8
<ul style="list-style-type: none"> Explains how the assessment procedures are used to determine the nature and extent of the injury Provides examples 	6 - 7
<ul style="list-style-type: none"> Provides characteristics of the assessment procedures you would use to determine the nature and extent of the injury 	4 - 5
<ul style="list-style-type: none"> Sketches in general terms the assessment procedures you would use to determine the nature and extent of the injury 	2 - 3
<ul style="list-style-type: none"> Provides some relevant information with regards to the assessment of injuries 	1

DISCLAIMER

The information contained in this document is intended for the professional assistance of teaching staff. It does not constitute advice to students. Further it is not the intention of CSSA to provide specific marking outcomes for all possible Trial HSC answers. Rather the purpose is to provide teachers with information so that they can better explore, understand and apply HSC marking requirements, as established by the NSW Board of Studies. No guarantee or warranty is made or implied with respect to the application or use of CSSA Marking Guidelines in relation to any specific trial exam question or answer. The CSSA assumes no liability or responsibility for the accuracy, completeness or usefulness of any Marking Guidelines provided for the Trial HSC papers.

Syllabus Content:

- Assessment of injuries
 - TOTAPS (Talk, Observe, Touch, Active and Passive movement, Skills test).

Through the use of relevant examples students will demonstrate an in-depth understanding of the assessment procedures to determine the nature and extent of the injury sustained by the basketball player.

Suggested answers may include:

The assessment of an injury is critical as it determines the nature and extent of the injury and therefore whether the athlete should be allowed to continue in the basketball game or seek professional medical assistance. The assessment should be undertaken using the following procedures;

Talk - Initially you would talk to the athlete to find out what happened prior to them collapsing on the court.

Questions may include;

- What happened?
- Where does it hurt?
- Did you hear any snaps or cracks?
- Is the pain sharp or dull?
- Has this injury happened before?
- Do you have any pins or needles?
- Are you allergic to anything?

Observe – After talking to the basketball player you would visually examine the site of the injury comparing it to the opposite limb. You would be looking for signs of deformity, swelling and redness/discolouration. If there is obvious deformity, there is likely to be a fracture or serious ligament/tendon damage, and medical assistance is needed. The injury should be managed appropriately until medical assistance arrives. If there is no deformity move on to the next stage of the assessment ('touch').

Touch – Once you have established that the basketball player doesn't have any serious deformity ask them if you can examine the injured body. If possible do the same to the other side of the body noting change in shape or temperature. When examining the injured site:

- Ask the athlete to rate their level of pain on a scale of 1–10 (1 = no pain, 10 = excessive pain)
- Start by touching away from the injured site and work your way towards the injury.
- Locate the exact location of the injury.

If you suspect a soft or hard tissue injury, stop assessment and treat with either soft or hard tissue management.

If the basketball player isn't in extreme pain then move to Active Movement.

DISCLAIMER

The information contained in this document is intended for the professional assistance of teaching staff. It does not constitute advice to students. Further it is not the intention of CSSA to provide specific marking outcomes for all possible Trial HSC answers. Rather the purpose is to provide teachers with information so that they can better explore, understand and apply HSC marking requirements, as established by the NSW Board of Studies.

No guarantee or warranty is made or implied with respect to the application or use of CSSA Marking Guidelines in relation to any specific trial exam question or answer. The CSSA assumes no liability or responsibility for the accuracy, completeness or usefulness of any Marking Guidelines provided for the Trial HSC papers.

Active Movement – Ask the athlete to attempt to move the injured part by himself or herself until it becomes too painful. Observe the degree of pain. Also observe the extent or range of movement the athlete has. If possible, compare it with the other limb. As the athlete moves, feel the injured site for any clicking or grating. If the athlete cannot move the injured site, or has only minimal range of movement, seek medical attention and manage as either hard or soft tissue injury.

Passive Movement – If you have reached the passive movement stage, it is likely that the injury is not serious. It is now necessary to determine whether the basketball player can return safely to the game. The ‘passive movement’ stage requires you to move the athlete’s injured body part and determine how much pain-free movement is possible. If the athlete cannot have the injured part manipulated through the normal range of movement without pain, you should not continue. RICER treatment should be administered. If the range of movement is normal and pain free, the athlete should be asked to stand.

Skills Test – If no pain was experienced during passive movement, then the basketball player should be asked to run backwards/forwards/sideways including some turning and jumping. If possible they may even undertake a some lay ups/dribbling/jump shots to ensure the injured area is able to move through its full range of movement without pain. If no pain is experienced during these tests, and full range of movement is evident, the athlete can return to the game.

If at any stage during the skills test the basketballer experiences pain, stop and treat as a soft tissue injury.

DISCLAIMER

The information contained in this document is intended for the professional assistance of teaching staff. It does not constitute advice to students. Further it is not the intention of CSSA to provide specific marking outcomes for all possible Trial HSC answers. Rather the purpose is to provide teachers with information so that they can better explore, understand and apply HSC marking requirements, as established by the NSW Board of Studies.

No guarantee or warranty is made or implied with respect to the application or use of CSSA Marking Guidelines in relation to any specific trial exam question or answer. The CSSA assumes no liability or responsibility for the accuracy, completeness or usefulness of any Marking Guidelines provided for the Trial HSC papers.

Question 31

(b) (12 marks)

Outcomes Assessed: H8, H17**Targeted Performance Bands: 2-6**

Criteria	Mark
<ul style="list-style-type: none"> • Clearly identifies various considerations that need to be taken into account when coaching children and young athletes • Effectively draws out and relates the considerations that need to be taken when coaching children and young athletes • Applies the skills of critical thinking and analysis • Illustrates answer with clear and relevant examples • Presents ideas in a clear logical way 	11-12
<ul style="list-style-type: none"> • Identifies some of the considerations that need to be taken into account when coaching children and young athletes • Attempts to draw out and relates the considerations that need to be taken when coaching children and young athletes • Communicates ideas and information using relevant examples 	9 - 10
<ul style="list-style-type: none"> • Provides information on some considerations that need to be taken into account when coaching children and young athletes • Provides some basic support for answer 	6 – 8
<ul style="list-style-type: none"> • Sketches in general terms the considerations that need to be taken into account when coaching children and young athletes 	3 - 5
<ul style="list-style-type: none"> • Provides some relevant information in relation to coaching children and young athletes 	1 - 2

Syllabus Content:

- Children and young athletes
 - Medical conditions (asthma, diabetes, epilepsy)
 - Overuse injuries (stress fractures)
 - Thermoregulation
 - Appropriateness of resistance training

Students will identify the various considerations that need to be taken when coaching children and young athletes. Using these various considerations they will demonstrate extensive knowledge and understanding of why each of these consideration needs to be taken into account when coaching children and young athletes. Students will provide a clear and concise answer with a range of examples.

DISCLAIMER

The information contained in this document is intended for the professional assistance of teaching staff. It does not constitute advice to students. Further it is not the intention of CSSA to provide specific marking outcomes for all possible Trial HSC answers. Rather the purpose is to provide teachers with information so that they can better explore, understand and apply HSC marking requirements, as established by the NSW Board of Studies.

No guarantee or warranty is made or implied with respect to the application or use of CSSA Marking Guidelines in relation to any specific trial exam question or answer. The CSSA assumes no liability or responsibility for the accuracy, completeness or usefulness of any Marking Guidelines provided for the Trial HSC papers.

Suggested answers may include:

Medical Conditions (Asthma, Diabetes and Epilepsy)

Asthma – A child with asthma should not avoid exercise however, if not managed properly it can have a detrimental effect on the child. Consequently, coaches should be aware of any athlete who has asthma, what the triggers (dust, wind, pollen, tobacco smoke) are and how to manage it and what to do in case of emergency. Children and young athletes should have an Asthma Action plan. Children and young athletes may develop exercise induced asthma. To prevent this a coach must ensure:

- A gradual warm up and cool down are undertaken
- Exercise intensity remains steady
- Preventative medication is taken before exercise and an inhaler is available if required during exercise
- Adequate amount of water is consumed
- If triggers are environmental remove athlete from that area.

If an asthma attack occurs the coach should be fully aware of the appropriate first aid for someone having an asthma attack.

Diabetes – A coach needs to be aware of any athlete under their care who has either Type 1 or Type 2 Diabetes in case they have a hypoglycaemic or hyperglycaemic episode. They will need to make sure that they have either had an injection or sufficient food intake prior to exercise, as well as allowing food breaks during training. This will then produce enough glucose for energy and therefore sustained exercise. The coach would also need to be fully aware of the signs and symptoms of hypoglycaemic or hyperglycaemic episode.

Signs of Hypoglycaemic may include;

- Increased Heart Rate
- Sweating
- Shaking
- Anxiety and confusion
- Dizziness
- Possible altered state of consciousness

Coaches should manage this by providing them with fast acting carbohydrates such as lollies or soft drinks.

Signs of Hyperglycaemic may include;

- Thirst
- Vomiting
- Excessive urination
- Rapid Breathing
- Rapid but weak pulse
- Drowsiness

DISCLAIMER

The information contained in this document is intended for the professional assistance of teaching staff. It does not constitute advice to students. Further it is not the intention of CSSA to provide specific marking outcomes for all possible Trial HSC answers. Rather the purpose is to provide teachers with information so that they can better explore, understand and apply HSC marking requirements, as established by the NSW Board of Studies. No guarantee or warranty is made or implied with respect to the application or use of CSSA Marking Guidelines in relation to any specific trial exam question or answer. The CSSA assumes no liability or responsibility for the accuracy, completeness or usefulness of any Marking Guidelines provided for the Trial HSC papers.

If an athlete exhibits these symptoms medical assistance should be sought immediately.

Epilepsy – Athletes who suffer from Epilepsy should avoid contact sports or participating in sport such as swimming, scuba diving or rock climbing on their own. It should however not prevent them from participating in other sporting activities. If an athlete was to have an epileptic seizure appropriate first aid should be administered which would include; not restraining them during the seizure, placing them in the recovery position and loosening their clothing. If the seizure lasts more than 5 minutes an ambulance should be called.

Overuse injuries (Stress Fractures) – Overuse injuries occur because of repetitive strain is placed on a body part such as a muscle/bone or tendon. These can include shin splints, stress fractures, tendonitis and tennis elbow. Overuse injuries tend to occur for the following reasons;

- High training intensity and volume
- Insufficient rest and recovery
- Specialisation in sport early on so they are completing the movement over and over again.
- Incorrect technique
- Inadequate warm ups
- Poorly fitting protective equipment/shoes
- Muscle imbalance

As a coach they need to not only be aware of what causes the injuries but also possible signs and symptoms. These include;

- Gradual onset of pain, which tends to be localised
- Pain increasing if it is not adequately treated
- Local swelling and tenderness

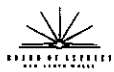
Thermoregulation – Children do not have the same ability to regulate body temperature as adults do and therefore take longer to acclimatise to extreme heat or cold. They have a reduced ability to sweat and rely on convection and radiation to regulate body temperature. Consequently, during hot and humid weather coaches should ensure their athletes are drinking small amounts of water regularly and provide adequate rest breaks in the shade. In both hot and cold weather appropriate clothing should be worn to assist thermoregulation such as hats in hot weather and jumpers in cold weather.

Appropriateness of resistance training – Resistance training is recommended for children and young athletes as part of an overall skill and fitness program. However, a coach must be aware of the capabilities of an athlete who is still growing and developing. Any resistance program should involve high repetitions and low weight. It is recommended that children and young athletes use their own body weight for resistance completing exercises such as push ups, sit ups, tricep dips and chin ups to reduce the risk of injury.

DISCLAIMER

The information contained in this document is intended for the professional assistance of teaching staff. It does not constitute advice to students. Further it is not the intention of CSSA to provide specific marking outcomes for all possible Trial HSC answers. Rather the purpose is to provide teachers with information so that they can better explore, understand and apply HSC marking requirements, as established by the NSW Board of Studies.

No guarantee or warranty is made or implied with respect to the application or use of CSSA Marking Guidelines in relation to any specific trial exam question or answer. The CSSA assumes no liability or responsibility for the accuracy, completeness or usefulness of any Marking Guidelines provided for the Trial HSC papers.

**Question 32 (a)**

Criteria	Marks
<ul style="list-style-type: none">Clearly explains the ethical issues associated with the use of technology in sportMakes the relationship clearly evident between the ethical implications and the use of technology to improve performanceProvides examples of the relationship between technology and improving performance	8
<ul style="list-style-type: none">Demonstrates the use of technology to improve performanceRelates the ethical implications associated with the use of technology to improve performanceProvides examples of ethical issues in the use of technology in sport	6-7
<ul style="list-style-type: none">Provides characteristics and features of technology used to improve performanceRecognises an ethical issue regarding the use of technology to improve performance	4-5
<ul style="list-style-type: none">Sketches in general terms some use of technology and/or ethical issues used to improve performance	2-3
<ul style="list-style-type: none">Provides facts or information regarding technology used OR an ethical issue in sport	1

Sample answer:

Equipment advances include: lightweight running shoes, swimsuits, golf balls, lighter and more aerodynamic bikes, broom stick handle in golf and heart rate monitors. Equipment advances have given modern athletes an advantage in terms of equipment available to improve performance. New and advanced technologies enable athletes to perform and compete at standards that were once considered impossible. For example, new materials such as stronger, lighter carbon are now being used for bikes.

While there have been benefits associated with the use of technology, there have also been some associated issues such as unfair access and competition. For example, invited athletes who attend Institutes of Sports have access to a wealth of technology to monitor adaptations, analyse and evaluate techniques, to make them the best in the world. This provides those athletes who have access to technology and equipment advances an unfair advantage in competition.

Some of the equipment advances are expensive. Unless an athlete has the financial support behind them, they may not have access to the same equipment. For example if two cyclists are racing, one with a more expensive, lighter, more aerodynamic bike compared to the other cyclist, then the athlete with the lightweight bike has a superior advantage. Hence the race is not solely about athletic ability, and therefore unfair.

Question 32 (b)

Criteria	Marks
<ul style="list-style-type: none"> Recognises the risk taking and ethical considerations associated with drug use in sport Makes judgments about athletes' use of drugs from a risk taking AND ethical perspective Communicates ideas and information using relevant examples 	11-12
<ul style="list-style-type: none"> Recognises the risk taking and ethical considerations associated with drug use in sport Provides points for and against the use of drugs by athletes from a risk taking AND ethical perspective Communicates ideas and information using relevant examples 	8-10
<ul style="list-style-type: none"> Recognises the risk taking and ethical considerations associated with drug use in sport Provides characteristics and features of athletes' drug use from a risk taking AND ethical perspective. Uses relevant examples 	5-7
<ul style="list-style-type: none"> Sketches in general terms risk taking and ethical perspectives of drug use in sport Provides an example 	3-4
<ul style="list-style-type: none"> Provides some relevant information about drugs in sport 	1-2

(b) In better responses, candidates demonstrated thorough knowledge and understanding of the risk taking and subsequent ethical considerations associated with drug use in sport.

In these responses, candidates clearly evaluated risk-taking behaviour and ethical perspectives and provided explicit and relevant examples to support their evaluation. These examples included implications for the sporting athlete, plus the physical, personal, social and financial consequences that come from drug use. In better responses, candidates also included both outcomes and limitations of (drug testing and the ethical implications) that arise from both.

In mid-range responses, candidates identified issues both for and against the use of drugs from a risk-taking and ethical perspective. Knowledge of drug use and risks were sound, but the judgement of ethical implications was mainly linked to 'cheating'.

In weaker responses, candidates sketched in general terms risk-taking and/or ethical perspectives of drug use in sport without making judgements. In many responses, candidates only focussed on one area or side of the argument and examples were general and lacked detail.


Question 32 (b)
Sample answer:

Performance-enhancing drugs can pose health, financial and social risks and also create an unequal playing field for athletes. Testing athletes for drugs will assist in preventing or deterring drug cheats and improve competition so that performances are due to training and genes rather than steroids.

There are dangers associated with use of performance-enhancing drugs. The dangers can be physical effects such as heart disease or loss of reputation and sponsorship if caught using drugs. For example, when Marion Jones got in trouble for using drugs, she lost her reputation for being a great athlete due to hard training and dedication. Drugs also increase the risk of cancer and heart disease. For these reasons athletes should be drug tested to reduce the risk of athletes using drugs to enhance performance and consequently do irreversible damage to their health.

Drug use for strength can have many negative effects on health. Anabolic steroids can lead to liver disease and increase the risk of heart disease. If an athlete is using drugs to enhance their performance they may have an unfair advantage, but they are also harming themselves. For example, if a weightlifter uses steroids they will be able to train harder and longer and get stronger faster. This could lead to shortening of their life (eg heart attack). Plus this is unfair and creates an uneven playing field along with long-term health effects. Drug testing is important as it will intimidate the athletes from using drugs since they will be banned if found using drugs.

Drugs are sometimes used by endurance athletes to enhance performance. For example, last year a cyclist was caught using EPO in the Tour de France. EPO improves aerobic ability and allows an athlete to cycle harder for longer. This makes the race unfair for the non-drug users and can reduce future sponsorship and sport development opportunities. EPO can cause heart attack, stroke and blood clots. Drug testing catches the athletes that cheat and deters them from taking the risk that also harms their health.

Some athletes use drugs such as diuretics, alcohol. These drugs are more commonly used to mask the use of other drugs. The health problems associated with using diuretics are kidney damage and dehydration. These drugs can also improve performance in those sports with weight classes. For example, before a 24-hour weigh-in for boxing, the boxer may use diuretics to make a lighter weight class and then rehydrate to be a heavier weight before the fight against a lighter opponent. Drug testing for diuretics helps reduce the risk of athletes cheating in weight classes and having unfair advantage. Large amounts of money are associated with sports like boxing through endorsements and gambling. The unfair environment created by drug use can create larger social harm because people bet on athletes without knowing whether drugs are used or not. Testing reduces the risk of competitors using and promoting good health above the desire to win at all costs.

Drug testing deters athletes from using drugs. When those athletes using drugs are disqualified, competition becomes fair.