

**Wednesday 16 May 2018 – Morning**

**LEVEL 1/2 CAMBRIDGE NATIONAL IN SPORT SCIENCE**

**R041/01** Reducing the risk of sports injuries

Candidates answer on the Question Paper.

**OCR supplied materials:**

None

**Other materials required:**

None

**Duration:** 1 hour



Candidate  
forename

Candidate  
surname

Centre number

Candidate number

### INSTRUCTIONS TO CANDIDATES

- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Answer **all** the questions.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Write your answer to each question in the space provided. If additional space is required, you should use the lined page(s) at the end of this booklet. The question number(s) must be clearly shown.
- Do **not** write in the barcodes.

### INFORMATION FOR CANDIDATES

- The number of marks is given in brackets [ ] at the end of each question or part question.
- The total number of marks for this paper is **60**.
- The quality of your written communication will be assessed in your answer to the question marked with an asterisk (\*).
- This document consists of **12** pages. Any blank pages are indicated.

Answer **all** the questions.

**1** Circle your chosen option to indicate which of the following are true or false.

**(a)** Type 2 diabetes is a medical condition that is insulin-dependent.

True / False [1]

**(b)** Stretching and pulse raising exercises are key components of a cool down.

True / False [1]

**(c)** Acute injuries are the result of a sudden trauma to the body.

True / False [1]

**(d)** Gender and flexibility are individual variables that can influence the risk of injury.

True / False [1]

**2** In a resource 'Asthma and My Child' produced by Asthma UK, some of the common symptoms of asthma which are identified include wheezing and coughing.

Identify **two** other symptoms of asthma.

1 ..... [1]

2 ..... [1]

**3** A rugby team employed a sports psychologist to help reduce the number of injuries as a result of players not being fully focused before each match.

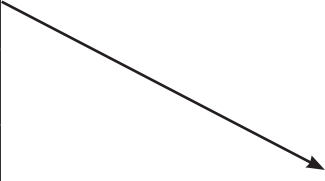
Before a training session the sports psychologist explained the psychological importance of a warm up.

Other than focus, describe psychological benefits that the sports psychologist could have included in their talk to the players and how they would reduce chances of injury.

.....  
 .....  
 .....  
 ..... [2]

- 4 One example of an overuse injury is tendonitis.

Draw a line from each of the other types of injury to a suitable example of that injury in the table below.

Types of injury		Example of injury
Overuse		Bruise
(a) Abrasion		Graze
(b) Contusion		Tendonitis
(c) Soft tissue injury		Sprain

[3]

- 5 Insulin dependency is one difference between Type 1 and Type 2 diabetes.

Describe **two** other differences between Type 1 and Type 2 diabetes.

.....

.....

.....

..... [2]

- 6 Shin splints is a common sports injury for marathon runners.

Complete the table below to show the type of injury it is, one symptom of it and the recommended treatment.

Type of injury	Symptom	Recommended treatment

[3]

7 (a) (i) Which **one** of the statements below is false?

<b>A</b>	Rest, ice, compression and elevation is a method used to rehabilitate soft tissue injuries
<b>B</b>	SALTAPS is an on-field assessment that stands for: See, ask, look, touch, active, passive and strength
<b>C</b>	Emergency action plans consist of personnel, communication and equipment
<b>D</b>	Fitness levels and wearing the correct protective equipment are both intrinsic factors that can influence the risk of injury

..... [1]

(ii) Explain the difference between 'active' and 'passive' for the on-field assessment of SALTAPS.

.....

.....

.....

..... [2]

(b)	Increased thirst	Seizure	Call 999	Cramp
	Give a sugary drink	Going to the toilet lots	Extreme tiredness	Hypoglycaemia
	Emergency care plan	Breathing difficulties	Inhaler	Dizziness

(i) Which **one** of the above could be a possible symptom of asthma, diabetes and concussion?

..... [1]

(ii) Which **one** of the above is the condition that describes low blood sugar?

..... [1]

(iii) Which **one** of the above is the best treatment for an asthma attack that is **not** severe?

..... [1]

(c) Describe how a netball coach should deal with a player who they suspect is having an epileptic fit.

.....

.....

.....

..... [2]

- 8 (a) Name **one** sport in which performers may wear both a gumshield and protective headgear.  
 ..... [1]
- (b) Name **one** item of performance equipment that may cause injury to another performer.  
 ..... [1]
- 9 (a) Using a practical example, describe an acute sporting injury where it would be suitable to use a bandage.  
 .....  
 .....  
 .....  
 ..... [2]
- (b) Applying a bandage can help ease the pain of an injury.  
 Explain other benefits to the performer of bandaging an injury.  
 .....  
 .....  
 .....  
 ..... [2]
- 10 Massage is one technique a sports therapist may use to treat injuries.
- (a) Describe the benefits to a performer of receiving a massage as a response to an injury.  
 .....  
 .....  
 .....  
 ..... [2]
- (b) Identify **two** other techniques a sports therapist may use when responding to a soft tissue injury the day after the injury has occurred.
- 1 ..... [1]
- 2 ..... [1]

- 11 (a) Describe lordosis and the impact it can have on a sports performer.

.....

.....

.....

..... [2]

- (b) Other than lordosis, identify **two** other sports injuries that are associated with poor posture.

1 ..... [1]

2 ..... [1]

- (c) Explain how a lack of exercise can cause poor posture.

.....

.....

.....

..... [2]

**12** John is following a sports leader course and for one of the units he must complete a safe warm up for a group of sports performers.

**(a)** Explain why each of the following characteristics of the group should be considered by John before starting the warm up.

**(i)** Size of the group

.....

.....

.....

..... [2]

**(ii)** Experience of the group

.....

.....

.....

..... [2]

**(b)** Identify **one** other specific need that should be taken into consideration before starting a warm up.

..... [1]

- 13 (a) Complete the table below identifying the components and examples of a suitable warm up for a hockey player.

Warm up component	Examples of warm up component
(i) .....	Hip circles taking the joint through its full range of movement
(ii) .....	Agility runs that change speed and direction
Skill rehearsal phase	(iii) .....

[3]

- (b) For each of the following, circle the most appropriate words in **bold** to complete each statement.

(i) A warm up **increases** / **decreases** heart rate [1]

(ii) A cool down **increases** / **decreases** / **gradually increases** / **gradually decreases** heart rate [1]

(iii) A cool down **slows down** / **speeds up** the removal of lactic acid [1]

- 14 Which one of the following is **not** an example of a cool down component that physically benefits a 100m runner?

(a) Light running to circulate blood and oxygen

(b) Static stretches to help the body's transition back to a resting state

(c) Sprints to reduce the risk of muscle soreness and stiffness

(d) Maintenance stretches to gradually lower body temperature [1]



- 15\*** Angarika has recently completed a football refereeing course. One of the elements she studied on the course was ensuring player safety.

Explain what extrinsic factors Angarika needs to be aware of both before and during a football match to reduce the risk of injury to players.

[8]

**END OF QUESTION PAPER**

This image shows a blank sheet of white paper designed for writing. It features a series of evenly spaced horizontal blue lines across its entire width. A single vertical red line runs down the left side, creating a narrow margin. The paper is otherwise completely empty, with no text or markings.



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