

**Friday 13 January 2017 – Afternoon**

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

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

Candidates answer on the Question Paper.

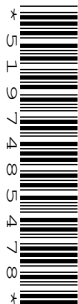
**OCR supplied materials:**

None

**Other materials required:**

None

**Duration:** 1 hour



Candidate forename		Candidate surname	
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Centre number						Candidate number				
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### 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** questions.

**1** Before a personal trainer constructs an exercise programme, a risk assessment is required.

**(a)** Describe how a risk assessment reduces the risk of injury.

.....

.....

.....

..... [2]

**(b)** Identify **three** environmental factors that could cause injury to a performer when exercising in a fitness suite.

1 ..... [1]

2 ..... [1]

3 ..... [1]

- 2 Before each training session a personal trainer needs to ensure the client completes various components of a warm up.

(a) Complete the following table.

[4]

Key components	Example of key component
(i) .....	Arm swings and hip circles
Dynamic movement	(ii) .....
(iii) .....	Skipping and jogging
Stretching	(iv) .....

- (b) Another key component for a warm up is the skill rehearsal phase.

For a named sport or physical activity, give an example of a suitable skill rehearsal phase of a warm up.

Named Activity:

.....

Example: ..... [1]

- 3 Describe **three** characteristics of the client that a personal trainer needs to take into consideration before they deliver a warm up.

1 .....

.....

2 .....

.....

3 .....

.....

[3]

- 4 During a training session a client is starting to feel breathless and the personal trainer suspects they are having an asthma attack.

- (a) Other than breathing difficulties, identify **two** other symptoms that could determine they are having an asthma attack.

Symptom 1: .....

Symptom 2: .....

[2]

- (b) The client has left their inhaler in the changing rooms.

Give **two** ways the personal trainer could deal with this asthma attack until the inhaler is given to the participant.

1 ..... [1]

2 ..... [1]

- 5 One of the main roles a steward has during a sporting event is ensuring the health and safety of the spectators.

A cricket steward has just been informed that a spectator is having a suspected epileptic seizure.

- (a) Identify **three** possible symptoms the steward could look for to confirm it is an epileptic seizure.

1 ..... [1]

2 ..... [1]

3 ..... [1]

- (b) Other people have made the area safe around the spectator who is having the seizure.

What else could the steward do to ensure the safety and recovery of the spectator?

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

- 6 Read the following statements.

- (i) R.I.C.E. stands for rest, ice, compression and elevation
- (ii) Acute injuries tend to develop gradually over a period of time
- (iii) Personnel, communication and response are the three components of an Emergency Action Plan
- (iv) Severs disease and Osgood Schlatter's disease are common adult injuries

Which **one** of the following is correct? (Circle your chosen option to indicate your answer)

- (a) Statements (i) and (ii) are true
- (b) All statements are true
- (c) None of the statements are true
- (d) Statements (ii) and (iv) are false

[1]

7 Using practical examples, describe how the following factors can prevent injury to performers.

(a) Coaching techniques

.....

.....

.....

..... [2]

(b) Performers that adhere to rule and regulations

.....

.....

.....

..... [2]

8 Shin pads are protective equipment used in various team sports to prevent injury.

(a) Other than shin pads, give an example of protective equipment.

Example ..... [1]

(b) Sometimes protective equipment in sport can actually cause injury to the performer.

Describe how the protective equipment you identified in part (a) could cause injury to the performer.

.....

..... [1]

9 Using a specific sporting example, describe **one** cause and **one** treatment for muscle cramp in the legs.

Example: ..... [1]

Cause: ..... [1]

Treatment: ..... [1]

- 10 (a)** Name a sporting injury where it would be suitable to use a sling.

..... [1]

- (b)** Describe how slings can aid recovery following injury.

.....  
 .....  
 .....  
 ..... [3]

- 11** A football player has gone down injured after a two footed tackle.

- (a)** What on-field assessment routine could the team physiotherapist use in response to the injury?

..... [1]

- (b)** The physiotherapist has diagnosed the injury as a sprained ankle.

What type of injury is this?

..... [1]

- (c)** How could the physiotherapist treat the sprained ankle to reduce the swelling?

.....  
 ..... [1]

- 12** Poor sitting, standing and sleeping positions are causes of poor posture.

Identify **two** other causes of poor posture.

1 ..... [1]

2 ..... [1]

**13 (a)** Describe the symptoms of hypoglycaemia.

.....

.....

.....

..... [2]

**(b)** Identify **two** responses to treat hypoglycaemia.

1 ..... [1]

2 ..... [1]

**14 (a)** Describe **three** psychological benefits of a hockey player using a warm up.

1 .....

.....

2 .....

.....

3 .....

..... [3]

**(b)** Using a practical example, describe how a hockey player could use mental rehearsal before a competition.

.....

..... [1]

**(c)** Using practical examples, explain what environmental factors a hockey coach should consider when planning a cool down.

.....

.....

.....

.....

.....

.....

..... [3]



**15\*** Using practical examples, describe the causes, symptoms and treatment of different overuse injuries.

[8]

**END OF QUESTION PAPER**

[illegible]



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