Modified Enlarged 24pt

OXFORD CAMBRIDGE AND RSA EXAMINATIONS

Monday 11 January 2021 – Morning

Level 1/2 Cambridge National in Sport Science

R041/01 Reducing the risk of sports injuries

Time allowed: 1 hour
plus your additional time allowance

No extra materials are needed.

Please write clearly in black ink.

Centre number | | | | | |

Candidate number | | | | |

First name(s) _____

Last name _____

READ INSTRUCTIONS OVERLEAF

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INSTRUCTIONS

Use black ink. You can use an HB pencil, but only for graphs and diagrams.

Write your answer to each question in the space provided. If you need extra space use the lined pages at the end of this booklet. The question numbers must be clearly shown.

Answer ALL the questions.

INFORMATION

The total mark for this paper is 60.

The marks for each question are shown in brackets [ ].

Quality of written communication will be assessed in questions marked with an asterisk (*).

ADVICE

Read each question carefully before you start your answer.

Answer ALL the questions.

1 Circle your chosen option to indicate whether the statement below is true or false. [1]

Concussion is a common hazard in boxing

TRUE **FALSE**

2 Which ONE of the following injuries is a footballer most likely to suffer after performing a slide tackle on a hard playing surface?
Circle your chosen option to indicate your answer. [1]

(a) Blister

(b) Open fracture

(c) Cramp

(d) Abrasion

3 Hockey requires the goalkeeper to wear a helmet.

(a) Describe how a helmet can help prevent injury to the goalkeeper.

_____

_____ **[1]**

(b) Describe how a helmet can cause injury to both the goalkeeper and to other players.

Goalkeeper: _____

_____

Other players: _____

_____

[2]

(c) Other than hockey and ice hockey, name another sport that requires a helmet to be worn to help reduce the risk of injury.

_____ **[1]**

4 **A long distance runner is preparing for their first marathon.**

Read the following statements and then:

identify the individual variable that best fits each statement

state how each individual variable can influence injury during the marathon.

1 **Due to a busy training schedule and family life, the runner has not eaten enough food before the marathon.**

Individual variable 1: _____

Influence on injury: _____

_____

[2]

2 **The runner manages to get between 7 and 9 hours' rest the night before.**

Individual variable 2: _____

Influence on injury: _____

_____

[2]

5 (a) Other than a tackle, describe another way a rugby player may suffer from an open fracture.

_____

_____ [1]

(b) The first aider can see blood and that the player is in a lot of pain.

What is the main sign a first aider could identify to confirm it is an open fracture?

_____ [1]

6 FIG. 1 below is an image that is going to be used on posters to raise awareness about symptoms and treatment for certain medical conditions.

FIG. 1

(a) Name the medical condition that the poster will be used for.

_____ [1]

(b) The company designing the poster want to add information about the symptoms of this medical condition and have identified coughing as one symptom.

Identify THREE other symptoms to be included on the poster.

(i) _____ [1]

(ii) _____ [1]

(iii) _____ [1]

(c) Other than using the treatment in the poster and calling 999, describe TWO other ways this medical condition can be treated.

1 _____

_____

2 _____

_____

[2]

(d) A poster for the treatment of diabetes could contain a picture of what item?

_____ [1]

7 (a) Explain how stretching in a cool down aids recovery.

_____

_____

_____

_____ **[2]**

(b) Name a type of stretching that should be performed in a cool down.

_____ **[1]**

(c) Describe how the weather needs to be considered by a hockey coach before the team completes a cool down outdoors.

_____

_____ **[1]**

8 (a) Name ONE acute injury that a gymnast may suffer from.

_____ **[1]**

(b) Give ONE example of how the named injury may occur in gymnastics.

_____ **[1]**

9 (a) Complete the table below using the different warm up components and practical exercises/examples from swimming. [4]

Warm up component	Suitable practical exercise/ example
(i)	Swimming 4 lengths of the pool
(ii)	Shoulder rotations
(iii)	Groin walk
Skill rehearsal phase	(iv)

(b) Describe the main purpose of dynamic movement in a warm up.

_____

_____ **[1]**

10 A football goalkeeper has injured their ankle in a collision with another player.

(a) Using practical examples, describe FOUR other extrinsic factors that can cause injury to a football goalkeeper during a game.

1 _____

_____

_____

2 _____

_____

_____

3 _____

_____

_____

4 _____

_____

_____

[4]

(b) SALTAPS is the on-field assessment routine the physiotherapist can use when treating the injury.

Identify the correct component of SALTAPS from the descriptions below:

(i) The physiotherapist encourages the goalkeeper to move the injured ankle themselves without any assistance.

_____ **[1]**

(ii) The physiotherapist decides the goalkeeper is fit enough to continue with the game as they are able to put weight on their ankle.

_____ **[1]**

11 Circle your chosen options to indicate whether the statements below are true or false.

(a) You should apply an ice pack to a deep cut to stop blood loss. [1]

TRUE **FALSE**

(b) To minimise blood loss, a cut on the arm should be kept below the level of the heart. [1]

TRUE **FALSE**

(c) Name the best piece of first aid equipment to deal with cuts and prevent infection.

_____ **[1]**

12 Describe the difference between a muscle sprain and strain.

_____

_____

_____

_____ **[2]**

13 (a) As part of a basketball player's warm up, they will increase their heart rate which delivers more blood and oxygen to the muscles.

Describe THREE other benefits of a warm up, to the muscles.

1 _____

_____

2 _____

_____

3 _____

_____

[3]

(b) The warm up will also allow the basketball player to 'get in the zone' and control their arousal levels.

Describe THREE other psychological benefits of a warm up.

1 _____

_____

2 _____

_____

3 _____

_____

[3]

14 FIG. 2 shows a diagram of the spinal column.

FIG. 2

(a) Draw an arrow on FIG. 2 above to indicate the location and direction of the curve of the spine of someone that has been diagnosed with kyphosis.

[1]

(b) **Describe how emotional factors influence poor and good posture.**

Poor posture: _____

_____

_____ **[2]**

Good posture: _____

_____

_____ **[2]**

15* During their careers, marathon runners and tennis players may experience different types of chronic injuries.

Explain the different types of chronic injuries they may experience, the symptoms and how R.I.C.E. could be used as a treatment. [8]

END OF QUESTION PAPER

ADDITIONAL ANSWER SPACE

If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).

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