



Oxford Cambridge and RSA

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

No extra materials are needed.



Please write clearly in black ink. **Do not write in the barcodes.**

Centre number Candidate number

First name(s) _____

Last name _____

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 (*).
- This document has **12** pages.

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.

Concussion is a common hazard in boxing

True

False

[1]

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.

(a) Blister

(b) Open fracture

(c) Cramp

(d) Abrasion

[1]

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.

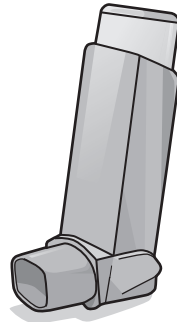


Fig. 1

(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.

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

[4]

(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.

True

False

[1]

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

True

False

[1]

(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.

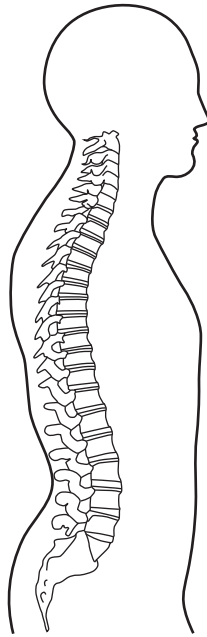


Fig. 2

(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]

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).

A large area of lined paper for writing, consisting of 25 horizontal dotted lines. A solid vertical line runs down the left side of the page, creating a margin. The rest of the page is open for writing.

