OCR
Oxford Cambridge and RSA

GCSE Physical Education

J587/01 Physical factors affecting performance

Question Set 1
Section A: Applied Anatomy and Physiology

1 **(a)** State the function of valves in the heart. **[1]**

1 **(b)** The bicuspid and tricuspid valves are structures in the heart.

Name **one** other valve in the heart. **[1]**

2 Identify a synovial joint in the body that allows more than two types of movement. **[1]**

3 Name the main muscle group used, and the plane of movement passed through, while performing a sit up.

(a) Muscle group:

(b) Plane of movement:

[2]

4 **Fig. 1** shows the performance of a gymnastic move.

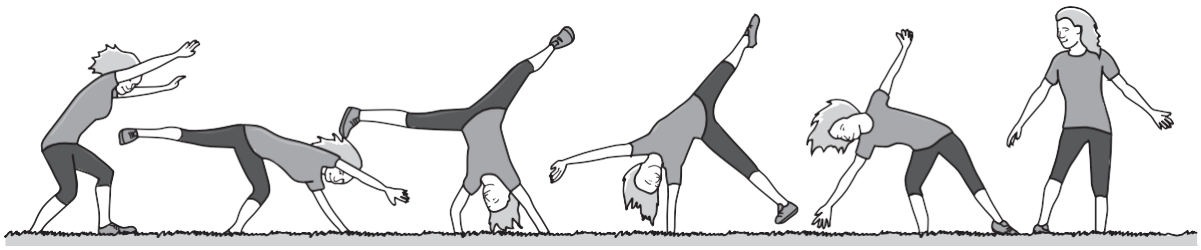

Fig. 1

Name the axis of rotation in **Fig. 1** **[1]**

5 Complete the following statement.

The action of a biceps curl is an example of a …..... class lever. **[1]**

6 **Fig. 2** shows a diagram that highlights one plane of movement.

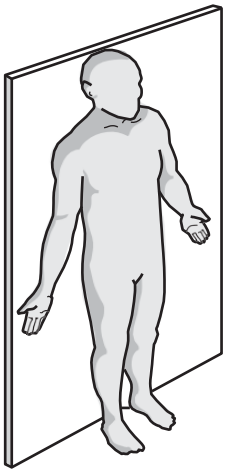

Fig. 2

(a) Name the movement plane highlighted in Fig. 2.
(b) Identify a sporting skill that passes through the movement plane in Fig. 2 **[2]**

7 Which one of the following describes the correct pathway of air through the respiratory system?

Put a tick (✓) in the box next to the correct answer.

A Mouth, trachea, bronchiole, bronchi, alveoli ☐

B Nose, trachea, bronchi, bronchiole, alveoli ☐

C Mouth, trachea, alveoli, bronchi, bronchiole ☐

D Nose, bronchi, bronchiole, trachea, alveoli ☐

[1]

8 A cricket player has just caught a hard ball.

Name a bone in the hand that is at risk from injury as a result of the impact of the ball being caught. **[1]**

9 Flexion and extension are two types of movement which are involved to allow circumduction around a joint.

Name the other **three** movements needed for circumduction around a joint to occur. **[1]**

10 Describe **one** difference between aerobic and anaerobic exercise.

Give a practical example of each type of exercise.

Difference:

Example of aerobic exercise:

Example of anaerobic exercise: **[2]**

11 Define stroke volume. **[1]**

12 During exercise cardiac output changes.

(a) Explain what is meant by the term cardiac output.

(b) State how cardiac output changes during exercise. **[2]**

13 Describe the role of tendons during physical activity. **[1]**

14 **(a)** Describe capillarisation.

(b) Capillarisation is a short-term effect of exercise.

Is this statement true or false? Draw a circle around your answer.

True **False**

[2]

Total Marks for Question Set 1: 20

OCR

Oxford Cambridge and RSA

Copyright Information

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact The OCR Copyright Team, The Triangle Building, Shaftesbury Road, Cambridge CB2 8EA.

OCR is part of the Cambridge Assessment Group; Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge